(Each tablet contains 100 mg phenazopyridine HCl

for what she's aware of

The symptoms that brought her to you

Urgency, frequency, burning-these are the discomforting symptoms of cystitis that caused the patient to seek your help. Lasting relief depends on controlling the infection. But immediate relief may call for an analgesic. This is the patient who needs Azo Gantanol®: Azo to relieve symptoms; the action of Gantanol® (sulfamethoxazole) to control the bladder infection.

Gantanol

and 0.5 Gm sulfamethoxazole.)

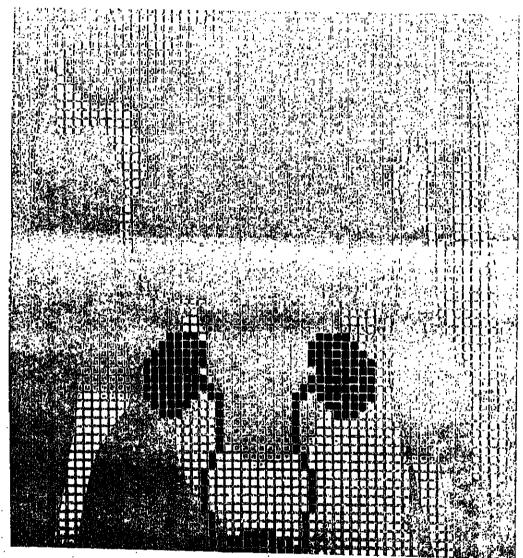
for what you're aware of

Bacterial infection

In just 2 to 3 hours after the initial adult dose, therapeutic blood and urine levels begin fighting E. coli as well as susceptible strains of Klebsiella-Aerobacter, Staph. aureus, Proteus mirabilis and, less frequently, P. vulgaris.

She'll feel better while she gets better

As the Gantanol (sulfamethoxazole) component begins to fight the infection, analgesic Azo starts to relieve symptoms associated with bladder inflammation and irritation. For symptomatic cystitis, prescribe Azo Gantanol to help your patient feel better while she



Before prescribing, please consult complete product pation, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually E. coli, Kiebslelin-Aerobacter, Staphylococcus aureus, Proteus mirabilis, and, less frequently, Proteus vulgaris) in the absence of obstructive promibe or foreign hodies, hyperter Note: Carefully coordinate in vitro sulfonamide sensitivity or toteign bodies. Importan tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media for patients already taking sulfonamides. Increasing frequency of resistant organisms currently is a limitation of the usefulness of antibacterial agents. Blood levels should be measured in patients receiving sulfonamides for sorious infections, since there may be wide variations with identical doses; 12 to 15 mg/100 ml is considered optimal for serious infections; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Children below age 12; sulfona-mide hypersensitivity; pregioney at term and during pursing period. Contraindicated in glomerulonephritis, severé hepatitis, uremia, and pyelonephritis of pregnancy with gastrointestinal disturbances, because of phenazopyridine HCl component.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Deaths from hypersensitivity

reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; clinical signs such as sore throat, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination should be performed frequently during sulfonamide therapy.

Precautions: Use with caution in patients with asihma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, hemolysis, a frequently dosene function, severe allergy, bronchia related reaction, may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: Blood dyscrasias: agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoobinemia; allergic reactions: erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scieral injection, photosensitization, arthraigia and allergic myocarditis; gastrointesthual reactions: nausea, emesis, abdominal pains, hepatitis, discrete analysis and allergic myocarditis (asset). diarrhea, anorexia, pancreatitis and signatitis; C.N.S. reactions: headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnius, vertigo and insomnia; and miscellaneous reactions: drug fever, chills, toxic nephrosis with oliguria and appria, polyarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities with some goltrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, suifonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Usual adult dosage for acute, painful phase of urinary tract infection is 4 tablets initially, then 2 tablets morning and evening. If pain persists beyond seven days, causes other than infection should be sought. After relief has been obtained, continued treatment with Gantanol

(sulfamethoxazole) may be considered.

NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine soon after

How Supplied: Tablets, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl, boltles of 100 and 500.

In acute, nonobstructed cystitis

zo Gantanol

(Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.)

医性性 解除性病病结构的 化基

B.I.D. therapy for the symptoms, for the infection

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nulley, N.J. 07110

New Electronic Device Permits 'Electromapping' of Heart: Page 2 International Headache Symposium— A Critique: 'Current Opinion,' Page 5

Medical Tribune

Medical News

world news of medicine and its practice—fast, accurate, complete ©1971, Medical Tribune, Ins. 电频点 A B

Wednesday, September 29, 1971 Vol. 12, No. 38

Liver Toxicity Of Methotrexate Held Doubtful

Oslo-Evidence that the abnormal liver findings seen in psoriasis patients treated with methotrexate are related to the disease rather than to the drug was presented here at the 19th meeting of the Nordic Dermatological Society.

Dr. Hugh Zachariae, of Marselishorg Hospital in Aarhus, Denmark, described 69 liver biopsies performed in 47 patients with psoriasis who were on treatment with methotrexate or considered for treatment.

When liver blopsies from 20 patients investigated before treatment were compared with those from 25 treated psoriatics, no significant differences were found.

A high incidence of pathologic findings was observed in both groups.

Patients with psoriatic erythroderma showed the highest frequency of abnormal liver findings. Nine of 10 had increased fetty infiltration, and eight of 10 displayed aigns of focal neorosis. The findings were not correlated with abuse of alcohol, obesity, or methotrexate therapy. No cases of cirrhosis were seen.

"It is suggested that pathologic liver biopsies in psoriatics may be related to the disease," he declared. "Long-lasting topical treatment or use of other drugs, however, could also contribute."

He said that 10 patients underwent two biopsies, three patients three biopsies, and two patients four biopsies, with an average interval of 10 months. These serial biopsies showed a mild tendency toward increased fatty acids. Patients treated for more than two years with methotrexate, Continued on page 16

Bubonic Plague In a 10-Year-Old First Since '70

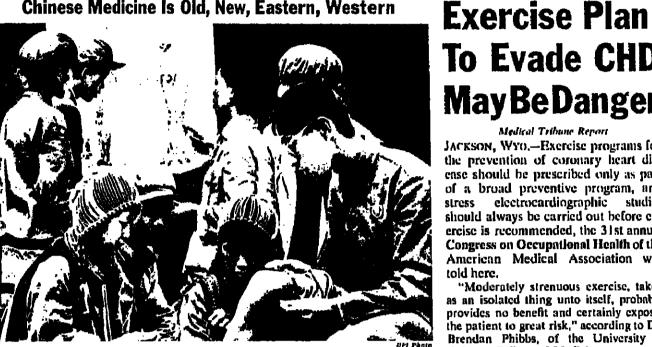
ATLANTA, GA .- A case of bubonic plague in a 10-year-old Pendleton, Ore., boy was reported by the Center for Disease Con-

The boy noticed pain in his left grou when lifting a heavy object on August 5, the CDC said. The next day, he was admitted to a local hospital with fever and a painful, erythematous lesion in his groin. A 1-mm., flat, slightly hemorrhagic, nonindurated lesion was noted on his left great

On admission, he was started on doxycycline, 100 mg. per day in two doses, which was continued until a surgical biopsy of the groin lesion was obtained on August 7. A purulent, necrotic lymph node was noted on biopsy, and the patient was given 500 mg. of cephaloridine intrave-nously and started on clindamycin 600 mg. orally per day in four doses.

On August 9, cultures of the biopsy hiaterial showed growth of gram-negative, blpolar rods, Plague was suspected, and Continued on page 16

Chinese Medicine Is Old, New, Eastern, Western



Medical practice today in China combines Western techniques with traditional, cen-

Barefoot Doctors First Link In Massive Health Program

CANTON, CHINA—"Barefoot doctors" are bringing medical aid to the 600,000,000 workers and peasants of China as the first step to what could become the world's most massive health care system. They provide the first link in a chain of medical aid that reaches from tiny rural villages to major hospitals having full general and specialist staffs in Peking and other main cities.

PHS Urges Rubella Vaccine Extension

must apply, potential vaccinees in these executive secretary of the committee

ally," the committee pointed out. "They continue, more community resources"

should receive vaccine only if they are may now be directed to the task of im-

shown to be susceptible by sorologic test- munizing adolescent girls and adult

he expanded."

Barefoot doctors are, in fact, neither barefoot nor doctors. A cross between a first-aid worker and a district nurse, they run both rural and industrial medical services with what officials describe as diligence and frugality. Their work has gone far towards solving a problem that troubles many other countries to one degree or another-how to provide remote areas with adequate medical

The exact number of barefoot doctors is not made available by the authorities. Quesses range between 1,000,000 and 5,000,000 throughout the country, and a story in a Peking newspaper mentioning that 12,000 of them function in the area of the capital suggests that this estimate is probably correct.

As district health visitors, the barefoot doctors are able to dispense simple remedies and deal with simple fractures, burns, cuts, etc. Once they have been given rudi-

Medical Tribune Report

ATLANTA, GA.-The desirability of ex-

tending programs of rubella vaccination

in adolescent girls and adult women was

emphasized in a revised recommenda-

tion by the United States Public Health

Service Advisory Committee on Immuni-

"Because of the precautions which

groups should be considered individu-

ing and if they agree to prevent preg- women,

zation Practices.

Medical Tribune Report

nancy for two months after immuniza-

The committee added: "To accom-

plish such extended use of rubella vac-

cine, serologic testing capabilities should

The recommendation was described

as a "logical step, the next phase" in

rubella control by Dr. H. Bruce Dull.

While the vaccination of children will

of the different activities of the compounds and a prediction of a new compound with activity similar to camptothecin's. Dr.

The method utilizes theoretic calculations that consider the distribution of electrons in molecules of the compound, he said. This distribution can explain most of

the molecule's prop-erties, including how reactive it is, the way it reacts, its solubility in water or oil, and its ability to penctrate the membrane

There was only one property, Dr. Flurry said, that

could explain camp- DR. FLURRY

currently being synthesized by a cooperat-Conlinued on page 20

To Evade CHD **MayBeDanger** JACKSON, WYO.-Exercise programs for the prevention of coronary heart dis-

ease should be prescribed only as part of a broad preventive program, and stress electrocardiographic studies should always be carried out before exercise is recommended, the 31st annual Congress on Occupational Health of the American Medical Association was

"Moderately strenuous exercise, taken as an isolated thing unto itself, probably provides no benefit and certainly exposes the patient to great risk," according to Dr. Brendan Phibbs, of the University of Arizona College of Medicine

"There is no real point in forcing a tense, eigarette-smoking, overweight executive to jog a mile a day while he worries about the accountants and sees with resentment his life situation," he declared.

"You are likely to do much more harm than good; the man's circulating cutecholamines are likely to reach astronomical levels; the diseased coronary artery that had not previously been manifested may find itself inadequate for the demands of the myocardium, and another death may be added to the already impressive total.

On the other hand, if this executive

Continued on page 16

Method Checks Cancer Drug Camptothecin and Derivatives

WASHINGTON-A computerized method of screening anticancer compounds is both quicker and cheaper than current labora- Flurry said. tory screening and should aid in designing completely new classes of active compounds, the American Chemical Society was told at its 162nd national meeting

The method was applied to camptothe-cin-a naturally occurring anticancer compound of current interest—and some of its inactive derivatives by Robert L. Flurry, Ph.D., Professor of Chemistry at Louisinna State University.



tothecin's notivity ngainst cancer and its derivatives' inactivity-the value and direction of the dipole moment, a measure of unequal electron distribution in a molecule. This proporty was significantly lower in camptothecin than in the derivatives, suggesting that camptothecia can penetrate more rendily into the cell.

A new compound, consisting of camptothecin molecules with one segment removed, was calculated to have close to the same properties as camptothecin itself and is predicted to have similar activity. It is Medical Tribune World Service

that its inventors claim is opening "new horizons" in heart disease research has been developed here by the Simes Institute of Experimental Cardiology.

The device automatically measures 240 points of the thoracic surface and converts the information every two milliseconds into electric impulses. An on-line computer translates the information into figures or directly prints an "electromap"

Prof. Bruno Taccardi, director of the electrophysiologic laboratory of the institute, said that experiments in both animals and human beings have proved the value

"Recent investigations carried out in this laboratory and in other research centers have shown that electromaps, which illustrate the instantaneous distribution of cardiac potentials on the body surface, yield more information on the electrical activity of the heart than can be obtained from the conventional electrocardiogram,"

Clinical Applications Limited

Alhough clinical applications of the device are still limited, Professor Taccardi said, chest maps have provided information of diagnostic value in one case of myocardial infarction that was not detected by an electrocardiogram and in several cases of coronary heart disease, right-ventricular hypertrophy, Wolff-Parkinson-White syndrome, and other heart disorders.

As part of the method, electrocardiograms are recorded on the anterior and posterior surface of the trunk in groups of four tracings at a time, using a multibeam cathode-ray oscilloscope. A reference electrocardiogram, generally the VR lead, is recorded, together with each group of chest electrocardiograms.

The amplitude of each tracing is measured during ventricular activation and recovery. The amplitudes are converted into potential values and plotted on maps of the area explored. A map is thus built up drawn by equipotential lines.

Professor Taccardi noted that in heart disease a normal electrocardiogram sometimes leads to diagnostic problems and is

Medical Fees in New Guinea High at Two Pigs a Visit

Medical Tribune World Service

SYDNEY, AUSTRALIA-Churchmen and medical workers in New Guinea have called for a thorough investigation of the practice of witchcraft on the island, it was reported here. Missionaries say that more sorcery is practiced there than modern medicine.

So strong is the grip of the witch doctors that they often accompany patients into government hospitals to continue their treatment. Fees are high—as much as two pigs per consultation, according to the natives.

NEWS INDEX

Abnormal liver findings in psorlasis not

Strenuous exercise by itself seen no

benefit in coronary heart disease 1

Computerized method to screen anti-

cancer agents is called quick, cheap 1

"Barefoot doctors" bring medical sla

to 600,000,000 Chinese workers 1

Coronary Diseases

Pharmacology (1,9)

Medicine Abroad

related to methotrexate use

Dermatology

mute in the presence of suspected clinical MILAN, ITALY-A new electronic device symptoms. In other cases, hypertrophic sections are found in certain individual parts of the heart that are extremely difficult to determine.

"In all these situations, and others that are too long to list, the electromap heart method promises results of major interest." he said, "primarily because of its ability to supply an extremely detailed analysis in time and space of the actions of electrocardiac phenomena."

Professor Taccardi noted that the device is almost as rapid as the standard electrocardiogram in application.

But he cautioned that it will not necessarily replace the electrocardiogram in routine diagnosis.

"The areas of use are different," he said. "The analysis of the electromaps," he continued, "will be applied in a large number of subjects, normal or pathological, in the various conditions of cardiac activity. This will establish the standard characteristics of various situations and their limits of variability."

The study, to be conducted in cooperation with various universities and hospitals, will produce much more precise information on the electric activity of the heart, he said, and is expected to solve certain problems related to final clinical applications of the new method,

Medicai Tribune World Service

COPENHAGEN-Postmortem clarification of

the frequency, localization, and extension

of thrombi in a geriatric clientele has been

ohtained by intraosseous phlebography

with contrast medium injected into the

Dr. Lennart Diener, of the radiologic

department of the Karolinska Hospital,

Stockholm, told the 13th annual meeting

of the International College of Angiology

here that the method could possibly re-

place dissection to some degree and com-

plement autopsy in more complete studies

countries which are more restrictive con-

fastened with a belt across the chest, he

explained. The body is then brought to a

semivertical feet-down position so that the

heavy contrast medium can fill the veins

As contrast medium, Dr. Diener uses

0.1 Gm., barium sulfate per ml. of suspen-

sion. When injected into the calcaneus, it

passes directly into the deep veins of the

leg without filling the superficial venous

He reported having performed post-

mortem phlebography as well as complete dissection of leg veins to the malleoli in

By increasing the amount of injected

contrast medium, the phlebography could

Liberalized Kansas abortion law, a

Technique for thawing frozen red cells

Only one of 50 ingestions in children

Pediatrics (8, 20)

has damage rate of only 2 per cent ... 3

year old, results in legal problems3

William T. Callaban; see Sports Report, page 23.)

from below without layering phenomena,

"The method can also be of interest in

The body is placed on a tilt table and

of the leg veins.

400 autopsies.

Abortion

Blood

cerning autopsy," he added.



investigators, above, at Cancer Re-

search Institute, Moscow, study the

mmunology of spontaneous tumors oc-

curring in dogs. At nearby Gamaleja

Institute, a group of researchers have

made significant contributions to

be extended to include the caval system

and the abdominal and possibly thoracic

Japan Government Reimburses

For Pollution-Linked Ailments

. Medical Tribune World Service

Tokyo-The Japanese Government has

appropriated 74,370,000 yen (\$206,580)

as compensation for persons suffering

from pollution-related ailments in 1971.

Environmental Agency, said that 3,993

the agency is planning a stepped-up aid

Currently, patients whose ailments have

been traced to air pollution receive a

2,000-yen (\$5.55) allowance for commut-

ing to hospital between three and 15 days

a month and an allowance of 3,000 year

(\$8.33) if the hospital trips take up more

than 15 days a month. Similar allowances

are made to victims of water pollution.

bronchitis, and pulmonary emphysema.

Congress explores the phenomenon of immunologic fall-off with age9

Center for Disease Control reports two

Physician who misdiagnosed appendi-

Meanwhile, authorities in the industrial

Buichi Oishi, director general of the

vessels, said Dr. Dlener.

budget next year.

knowledge of cancer of the liver.

Phlebography Found to Pinpoint Thrombi Post Mortem

CLINICAL NEWS NOTE: "With regard to reducing the seriousness of injuries to the

lower extremities, particularly the knee, it is recommended that football players be

outfitted with low shoes and some form of disk or flat heels or short cleats." (Dr.

Immunology

Epidemiology

Legal Medicine

Warsaw-The delicate and difficult work ponematoses.

"We do not have in view for the foreseeable future immunogenic agents which can help us toward vaccination," said Dr. Guthe, chief WHO medical officer for venereal disease and treponematoses. "We must therefore improve our methods and improve our indices by obtaining more contact interviewers trained for the pur-

"For this, funds are needed by central and local health authorities to provide the only means whereby we can envisage handling the problem successfully."

"Common Market" of VD

Referring to a comment by Prof. Axel Perdrup of Copenhagen that more than 50 per cent of Denmark's VD cases came from abroad, Dr. Guthe stressed the need to recognize that there is a "common market" in venereal diseases.

"Let us keep this common market in mind," he said, "because the intercountry spread complicates the fight for all of us when it comes to contact tracing and case

ported by Dr. Pierre Durel, secretary-Against Venereal Diseases.

Identical Methods Tried

In this project, the Swedish departments Jämtland and Västmanland have been paired with the Vaucluse in France for a persons are being aided this year and that trial of identical medical, epidemiologic, and administrative methods in VD control The experiment is based on a new Swedish law concerning a wide range of commu-

Polish participants reported that mass serologic screening disclosed a syphilis incidence ranging from 0.06 to 0.15 per cent in such groups as voluntary blood donors; military conscripts, pregnant women, and transport workers. The highest rate, 2.5 per cent, was discovered among prison

city of Tokai, south of Nagoya, have begun a program of free medical care for all Commenting on these findings, Dr. patients suffering from pollution-inspired Guthe said it is likely that mass screening. respiratory diseases. The measure is the however cumbersome, will probably have first of its kind ever instituted in Japan and to be employed more widely in the future. covers patients suffering from chronic He noted that automation of the Trepobronchitis, bronchial asthma, asthmatic nema pallidum hemagglutination test ap-

Contact Interviews 'Only Hope' as Curb In World VD Spread

of contact investigation offers the only hope for controlling the world-wide spread of venercal diseases, Dr. Thorstein Guthe, of the World Health Organization, declared here at an eight-nation round-table discussion organized by the International Union against Venereal Disease and Tre-

finding."

France and Sweden are cooperating in a joint pilot project to determine whether simplification of reporting procedure and the cutting of administrative red tape will improve the cooperation of physicians with public health authorities, it was regeneral of the French National League

inmates.

pears to show promise.

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Coming next issue: see page 5

MEDICAL TRIBUNE is published each Wednesday by Medical Tribune. Inc., 315 Rast 62nd St., New York, N.Y., 10021, Controlled Circulation postage, paid at Farmingdals, N.Y., 11733, Subscription \$12.50.

Year-Old Kansas Abortion Law Only 2% Loss Seen Not Without Legal Problems With New Technique pregnancy, and the majority of the women.

in the hospital.

undergoing the operations were 18 to 22

years old, unmarried (73.6 per cent), and

white (89.4 per cent), and spent one day

Statistics Not Alarming

Dr. Edwin Lyman, executive director of

the Board of Health, said that for the most

part the statistics were not alarming nor

"I have nothing to compare with," Dr.

Lyman commented, "This is our first year

of experience. I can state that the law has

not altered significantly the state's birth

rate-there was no abrupt drop in births.

This indicates to me that the number of

abortions that used to be carried out il-

legally in the state just about equaled the

With regard to the fact that more out-

of-state residents (5,305) obtained abor-

tions than Kansans (3,244), Dr. Lyman

observed that the majority of the opera-

still illegal under most circumstances.

number carried out legally last year."

did they seem out of line.

Wednesday, September 29, 1971.

KANSAS CITY, KANS .- The first year of operation of a liberalized Kansas abortion law has resulted in more legal than surgical complications.

Although no maternal deaths were attributed to the 8,549 therapeutic abortions performed in the state, health officials realized too late that 2,400 of the procedures were performed in violation of statutory requirements. Kansas law says that a therapeutic abor-

tion must take place in a hospital "licensed by the State Board of Health and accredited by the Joint Commission on Accreditation of Hospitals."

The statistics, however, showed that Holton City Hospital, Decatur County Hospital, Lindsborg Community Hospital, and, in this city, Douglass Hospital performed abortions while not being J.C.A.H.accredited. Douglass, a 50-hed institution, accounted for almost all-2,395-of the illegal operations.

The Board of Health turned over the matter to the State Attorney General's office for investigation. Under the abortion statute, violators could be charged with a class D felony, which carries a sentence of one to 10 years in the state penitentiary and a fine up to \$5,000.

Meanwhile, some Kunsas physicians and legislators expressed concern over the first year's abortion tally, which they said is twice as high as was predicted when the law was passed. Dr. Francis Bice of Wakeeney, health board member, commented that the "sickening" total should show legislators "how much a bunch of damn fools they were to pass such a law."

10-Day Ban Declared

At the University of Kansas Medical Center, Dr. William O. Rieke, who became vice-chancellor of medical affairs in July, declared a 10-day ban on abortions August 20. He explained that it was in accordance with a general hospital directive limiting all elective surgery procedures through August 30 because of a nursing shortage.

Dr. Rieke admitted in an interview, however, that the ban was also instituted so that he could "verify that all our procedures are done under the best conditions."

He noted that therapeutic abortion is an emotional political issue in Kansas at this time and added: "I don't think people appreciate the hot spot I'm sitting in." The medical center staff performed about 2,200 of the state's therapeutic abortions

The medical center's administration already had decided to omit any reference to abortion in the Hippocratic Oath administered to medical students graduating

After a special meeting with Dr. Kermit Krantz, chief of the obstetrics and gynecology department, and other department personnel, Dr. Rieke issued a statement saying, "I have every assurance that the letter and spirit of Kansas law have been met in the past and will be in the future," and removed the general ban on abortions after August 30.

According to the first year's statistics on Kansas therapeutic abortions, 88.8 per cent were performed to preserve the nother's mental health; 85.8 per cent were performed during the first trimester of

Australian MDs Now Call Sterilization Ethical Medical Tribune World Service

SYDNBY, AUSTRALIA-The Australian Medical Association has abolished its ethical restriction on operations for the sterilization of men and women. The restriction was described as "a

19th-century provision" by Dr. J. R. Magarey, a member of the A.M.A. Federal Council, who proposed that the Federal Assembly abolish it. The assembly voted by a large majority to delete from the A.M.A.'s code of ethics a paragraph disapproving of sterilization unless for therapeutic reasons.

Of Red Cell Thawing

Medical Tribune Report Washington Bureau

WASHINGTON-An improved technique of thawing freeze-preserved washed crythrocytes damages only 2 per cent, compared with 25 per cent previously, it was re-

The technique, developed by Dr. Harold T. Meryman, associate research direcfor of the American Red Cross blood program, for thawing the red cells, makes use of a glucose-staline solution passing through the red cells during centrifugation to wash out the glycerol added before freezing. One of the most important benefits of

freeze preservation is that the erythrocytes emerge free of hepatitis, Dr. Meryman observed at a press conference held during the annual meeting of the Society for Cryobiology.

"No confirmed reports of hepatitis being transmitted through transfusion of frozen red cells have appeared," he said.

tions were performed in Kansas City, Kans., which is just across the street from In Dr. Meryman's technique, the glyc-Kansas City, Mo., where abortions are erol that is used to prevent ice formation during freezing is removed during thaw-

ing by paying a phicore-valing solution through the red cells while they are being centrifuged. The process takes about 30

Dr. Meryman said that a freezing method developed five years ago by Dr. Charles

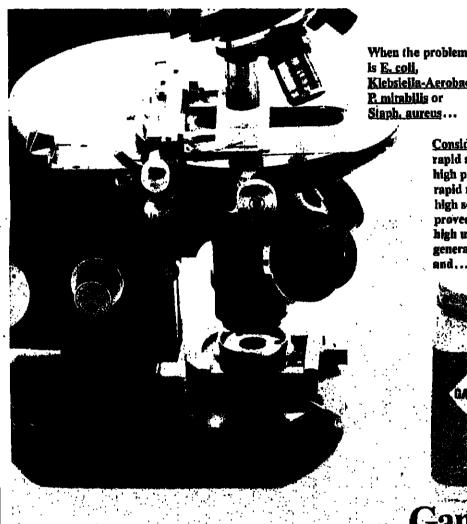
Huggins, of Massachusetts General Hospital, causes a loss of about 25 per cent of the red blood

predicted that by the end of this year 50,-000 units of frozen washed blood with he available and that 18 regional centers will

be in a position to process 100,000 units of frozen blood a year.

The cost of processing the frozen cells, \$37 a pint, compared with \$12 for regular donated blood, will be a limiting factor in their availability, they noted.

In addition to the Boston and Washington, D.C., centers, the A.R.C. is sending freezing machinery to blood banks in Atlanta, Cia.; Birmingham, Ala.; Nashville, Tenn.; Charlotte, N.C.; Cleveland; Columhus, Ohio; Detroit; St. Louis; Albany and Rochester N.Y.; Los Angeles; Portland Ore.; Tueson, Ariz.; St. Paul; Lansing, Mich.; and Hartford, Conn.



Klebsieija-Aerobacter, P. mirabilis or Staph, aureus. Consider this:

rapid absorption, high plasma concentrations rapid renal clearance. high solubility at urinary pH, proved reliability, high urinary drug levels, generally good tolerance, and...<u>econom</u>y.



Gantrisin[•] sulfisoxazole/Roche®

classic for nonobstructed cystitis, pyelitis and pyelonephritis 4 to 8 tablets stat, 2 to 4 fablets q.i.d.

plete product information, a summary of which follows: Indications: Acute, recurrent or chronic urinary tract infections (primarily cystils, pyelitis, pyelonephritis) due to susceptible organisms (usually E. coil, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis, and less frequently, Proteus vulgaris) in the absence of obstructive uropathy or foreign bodies. Important Note: In vitro sulfonamide sensitivity tests are not always reliable; tests must be epordinated with bacteriologic and clinical response. Aminobenzole acid should be added to follow-up culture media for patients already taking sulfonamides.

Currently, the increasing frequency of resistant organisms is a limitation of the usefulness of antibacterial agents including sulfonamides.

ig sulfonamides. Preo sulfonamido blood levels should be

1'reo sulfonamide blood levels should be measured: in patients' receiving sulfonamides for serious infections since there may be wide variations with identical doses; 20 mg/100 ml should be maximum total sulfonamide level, as adverte reactions occur more frequently above this level.

And stope formation.

Adverse Reactions: Blood dyterasics: Supplied: Tablets containing 0.5 Cht sulAgranulocytosis, aplastic anomia; thrombosytoponia, leukopania, hemolytic

Contraindications Hypersensitivity to suffornamides, infants less than 2 months of age, pregnancy at term, and during the nursing period.

Warnings Safety of suifornamides in pregnancy has not been established, Suifornamides will not cradicate group A streptococci. Dentis have been reported from hypersensitivity reactions, agraquilocytosis, apiastlo anemia and other blood dyserastas associated with suifornamide administration. Clinical signs such as sore throni, fever, pallor, purpura or jaundice may be early indications of serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination should be performed frequently during suifornamide therapy.

Precaulons: Use with caution when implications: Use with caution when implications of hopatic function, severe allergy or broughlal ashmin is present. In glucoso-6-phosphate dohydrogenase-deficient individuals, hemolysis (frequently a dose-related reaction) may occur. Maintain adequate fluid intake to prevent crystalluria. Adverse Réactions: Blood dyserasias:

Averse Réactions: Hiodal dyserasias:

Averse Réactions: Miodal dyserasias:

Averse Réactions: Adverse Réactions: Advers



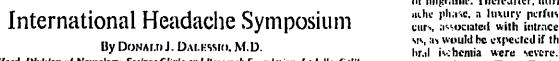
Hospital Association. Ambulatory care

continues to be the fastest-growing

service in the nation's hospitals. In 1970 the 7.123 hospitals registered by the American Hospital Association reported a total of 181,400,000 outpatient visits, for an increase of 11.1 per cent over 1969.

to benefit from chronic therapy with clonidine. Also, several papers from different areas of Europe and Israel reported on the prophylactic effects of BC-105, which has proved effective in reducing the frequency and intensity of vascular headache and

pharmacology an exercise for those in other lands, who practice medicine in less antagonistic circumstances.



By DONALD J. DALESSIO, M.D. Head, Division of Neurology, Scripps Clinic and Research Foundation. La Jolla, Calif.

in a second of the second of the second

THE AUTHOR, recently returned from the International Headache Symposium held in Elsinore, Denmark, should confess that he was one of the organizers of the conference—hence what follows cannot be said to be an entirely objective critique.

Several entirely new observations were reported at the meeting, G. W. Bruyn of the Netherlands found that patients with migraine have elevated blood ammonia trols he found that the plasma ammonia ranged from 21 to 63 micrograms/100 ml. with a mean of 40 micrograms/100 ml. In 22 patients with migraine, the levels ranged from 39 to 390 micrograms/100 ml., with a mean of 103 micrograms/100 ml. These patients did not have liver disease. This important observation requires confirmation and further biochemical investigation, but it abnormality producing headache, related to a resting hyperammonemia. Should this prove to be the case, some form of protein restriction in the diet might be advisable for susceptible pa-

tients with migraine. Pederigo Sicuteri of Florence, Italy, from whose laboratories many of the recent clues to migraine and its treatment have come, presented data relating hypertension and migraine to a common enzymatic deficiency, reduced monamine oxidasc. He found a relative deficiency of monamine oxidase in the liver biopsies of hypertensive subjects and in the platelets of patients with migraine, where it was reduced by one-half. A possible link between these diseases is a logical conscquence of this finding.

C. NORMAN SHEALY, of the Gundersen Clinic, Wisconsin, presented data on the concept of dorsal column stimulation for the relief of chronic pain. He introduced this idea in 1966 and shortly thereafter, on the basis of his work, he was awarded the first Harold G. Wolff Prize, given by the American Association for the Study of Headache. His method of treatment is based on raising the pain threshold by placing a bipolar stimulating electrode in-side the dura at some level of the spine well above the point of pain input. The patient then controls the amount of dorsal column stimulation by means of an electrical device which he carries in his pocket.

Shealy reported on 15 patients followed for a minimum of six months, in 75 per cent of whom dorsal column stimulation was effective in the relief of organic pain. The significance of this work cannot be overemphasized. It relates neurophysiology to the particularly difficult and pernicious clinical problem of chronic pain. Furthermore, and perhaps more important, it shifts the emphasis for pain relief from ablation to stimulation, or from a basically destructive lesion to one wherein symptoms are controlled without altering normal physiological function.

Owen and his colleagues of Basel, Switzerland, presented interesting studies on the influence of ergotamine and methysergide in the storage of biogenic amines.

COMING NEXT ISSUE

- Mariluana Survey finds 15 per cent of teen-agers have used "pot."
- Breast cancer Careful screening may spare women from radical mastectomy.
- Vitamin deficiency Debate on requirements may cloud extent of problem.

levels of significance. In 12 normal conduced a protective influence against the serotonin-depleting activity of reserpine. Similar protection could not be produced with ergotomine. Lance of Australia has demonstrated reduced platelet serotonin

> mentioned above may relate to its use in the prophylaxis of migraine. Several physiologic studies were presented which demonstrated again that in

to levels critical for adequate oxygenation of the brain. Skinhoj of Copenhagen, us-

bral blood flow, but found that there is diminished local cerebral blood flow of great significance in the prodromal phase of migraine. Thereafter, during the headache phase, a luxury perfusion state occurs, associated with intracerebral acidosis, as would be expected if the initial cerebral ischemia were severe. O'Brien of Newcastle upon Tyne, England, finds that the changes measured by radioactive techniques in the prodromal phase of migraine are widespread and bilateral, and not necessarily related to localized aural symp-

G. S. Barolin of Austria, presenting the Harold G. Wolff Lecture, reviewed his experience with electroencephalographic findings in migraine. F. G. Sulman of Jerusalem offered the first paper in this author's recent memory relating disease state to climate. The hot, dry winds of Israel may produce headache in sensitive levels prior to a migraine episode. Thus subjects. In 70 of 80 patients so affected, the protective effects of methysergide there was an increased urinary serotonin excretion associated with the heat stress.

What was new in theraneutics? The English reported on their further trials with clonidine, an antihypertensive drug may provide another clue to a dietary the prodromal phase of migraine, a reduc- which also reduces vasomotor activity and tion in cerebral blood flow occurs, at times which shows promise of being a useful agent in migraine prophylaxis. Dr. Marsha Wilkinson of London presented data ing intracarolid radioactive xenon inject to show that persons subject to headache tions for determination of regional cere- after ingestion of tyramine are most likely

has some antidepressant properties. Papers on clinical pharmacology were lacking from the large U.S. group present. It seems evident that clinical research on new drugs in this country is fast becoming an obsolete and occult pursuit. One might observe that we have come full cycle and that pressures from the Food and Drug Administration, combined with the ever-present threat of malpractice suits, have served to make clinical

1962 was

In 5 additional studies,2-5 of 1974 infants washed with pHisoHex. Staph colonization was only 2.4%; while in 1160 "unwashed" control infants, colonization amounted

Anti-Staph protection for the Infant usually begins with a pHisoHex bath before he leaves the delivery room. It can be continued and strengthened throughout the infant's stay in the hospital nursery by bathing him daily with pHisoHex and having everyone who handles the infant wash his hands with pHisoHex before and after handling the baby. This routine builds a cumulative, rinse-resistant film of antibacterial hexachiorophene on the skin to form a powerful barrier against Staph and many other bacteria.

Mothers can maintain this antibacterial protection at home by bathing baby exclusively with pHisoHex. And nonalkaline, hypoallergenic pHisoHex is kind to skin. Won't dry or tend to Irritate even when used frequently.

References: 1. Gluck, Louis; Hosp. Practice 3:33. Jan., 1988 (author's correction). 2. Payne, Margaret C.: Wood, H. F.; Karakawa, Walter, and Gluck, Louis; Am. J. Epidemiol. 22:305, Nov., 1985. 3, Gluck, Louis, and Wood, H. F.: New England J. Med. 285:1177, Dec. 14, 1981. 4, Simon, H. J.; Allwood-Paredes, Juan, and Trejos, Alfonso: Pediatrice 36:254, Feb., 1985. 5, Gluck, Louis, and Wood, H. F.: New England J. Med. 285:1265, June 8, 1983, 6, Simon, H. J.; Yafe, S. J., and Gluck, Louis; New England J. Med. 285:1171, Dec. 14, 1981. Dec. 14, 1961.



The second second

Jausethidiner Warn patients about the potential hazards of orthosistic hypotension, which can becaut frequently. To prevent sinting, patients should sit or its down with onset of dizziness or weakness, which may be particularly bothersome during initial dosage adjustment and with posturing in a constitution of the merchant of the manufacture within the morning and is accentuated by hot world sticking guarantidine.

Concurrent use with reworlds derivatives may cause excessive postural hypotension, bradycardis, and mental depression.

If possible, withdraw therapy 2 weeks prior to surgery to svold possible vascular collapse and to reduce hazard of cardiac arrest during anasthesials. If emergency surgery is inclusted, administer breansthetic and anasinetic agents cautiously in reduced dosage with oxygen, atropine, and vasopressors with extreme caution because patients of a guarantificial may have a greater propensity for cericles armythmiss.

bronchial asthma, since the condition may be aggravated, hydrachlorathiaside: Small bowel stenoels, with or without ulceration, has been associated with use of enteric-costed thiazides with potassium, and with enteric-costed potassium alone. These bowel lesions have caused obstruction, hemorrhage, and perforation; surgery was frequently required and deaths have occurred. Atthough the incidence of these lesions is low, and a causal relationship in man has not been definitely established, enteric-coaled potassium salts have been implicated. Therefore, coated potassium solitaining formulations should be used only when detarry supplementation is not practical and discontinued immediately if abdominal pain, distention, nauses, vorniting, or Gi blood flow is reduced, particularly in turn, renal blood flow is reduced, particularly in those with impelred renal function. If progressive renal insufficiency is observed, discontinuance of drug may be desirable. In patients with renal disease, thisztides may precipitate azotemia. Cumulative affects may develop in those with impaired renal function, bosage should slways be carefully titrated.

lienis with cirrhosis and seciles, watch for symptoms of impending hepatic come (confusion, drowsiness, tremor) and test for increased arterial ammonia concentration, sodium and potassium excretion. Thiszides may decrease glucose tolerance; use cautiously in diabatics. Hyperuricemia may occur but is generally reversed by a uricosuria espent, Thiszides may decrease siterial responsiveness to norephiephrine and increase responsiveness to norephiephrine and increase responsiveness to tubocurerine; if possible, withdraw therapy 2 weeks prior to surgery. Hypotensive episodes under anesthesia have been observed, if emergency surgery is indicated, preanesthetic and anesthetic agents about the administered in reduced dosage.

The possibility of sensitivity reactions should be considered in patients with a history of allergy or bronchist sprime.

Oronnal seprime.

Use in Pregnancy

Guanathidine: The safety of guaristhidine for use
In pregnancy has not been established; therefore, this drug should be used in pregnant patients
only when, in the judgment of the physician, its
use is desimed establish to the wellars of the
patient.

all in the same boat

many hypertensives do better on

Esimil may get things moving for all sorts of patients with moderate to severe hyperten-

The key is guanethidine—perhaps the most

components—guanethidine and

hydrochlorothiazide—are lower

So adverse reactions

for all sorts of

than with either used alone.

Esimil. A smoother course

hypertensives.

are usually minimized.

sion. Often controls blood pressure when

And with Esimil, dosages of both

effective antihypertensive available.

other antihypertensives fail. Usually keeps

hydrochlorothiazide

it controlled, too.

trolyte imbalance (hyponatremia, hypochloremic alkalosis, hypokalemia). Warning signs; dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguris, tachycardia, Gi disturbance. Serum and urine electrolyte determinations are particularly important when patient is yomiling excessively; receiving paranters! fluids, steroids, or ACTH; during brisk diuresis; in presenteriness.

actions, or ACITY during brisk divirests; in presance of severe cirrhosis.

interference with adequate oral intake of electrolytes will also contribute to hypokalemia, Digitalis
may exaggerate metabolic bilects of hypokalemia
espacially with reference to myocardial activity.
(Signs of digitalis intoxication may be broduced
by formerly tolerated doses of digitalis.) Hypokaleby formerly tolerated doses of digitalis. Hypokalemia may be avoided or treated with supplemental
potassium or potassium-rich foods. Supplemental
potassium is indicated when serum potassium is
4 mEq filter or less, or if patient is receiving digitalis. Chibride deficit may be corrected with
ammonium chioride (except in those with hepatic
or renal disease) and largely prevented by a nonrigid salt intake. If dietary salt is unduly restricted, especially during hot weathar, in severely
edematous patients with congestive heart falture
or renal disease, a low salt syndrome may complicate thereby with thistides.

Hyperuriosmis (or frank gout) may be precipi-

Hyperuricamia (or frank gout) may be precipi-taled in certain patients, inaulin regularments in

diabetic patients may be increased, decreased, or unchanged. Latent diabetes may become may test during thiszide therapy. If nitrogen retention indicates onset of renal impairment, discontinue drug.

rypersnativny—purpura, proteenativny—triticaria, necrotizing angilita. Hematologic—fet-kopenia, thrombocytopenia, agranulocytosis, aplastic anemia. Cardiovasculair—orthostatic hypotension may occur and may be potentiated by alcohol, barbiturales, or narcotics. Miscallaneou—musie spasm, weakness, resilessness. Whenever adverse reactions are moderate or severa, reduce dosage or withdraw therapy.

Optimal dosage must be determined for each individual. *Note:* 10 mg guarathidine monosulfate present in Esimil is equivalent to 8.4 mg guarathidine sulfate USP (Ismalin[®]). How Supplied

Tablets (white, scored), each containing 10 mg
guanethidine monosulfate and 25 mg hydrochiorothiazide; bottles of 100.

efore starting therapy, consult complete product

CIBA Pharmaceutical Company Summit, New Jersey

CIBA



In a hospital study from 1960 to 1967, only 2 positive staphylococcal lesions were noted among 34,262 infants washed with pHisoHex*. Both occurred in 1962.



mubacterial ekin desneer

Winthrop Laboratories, New York, N.Y. 10018 Winthrop

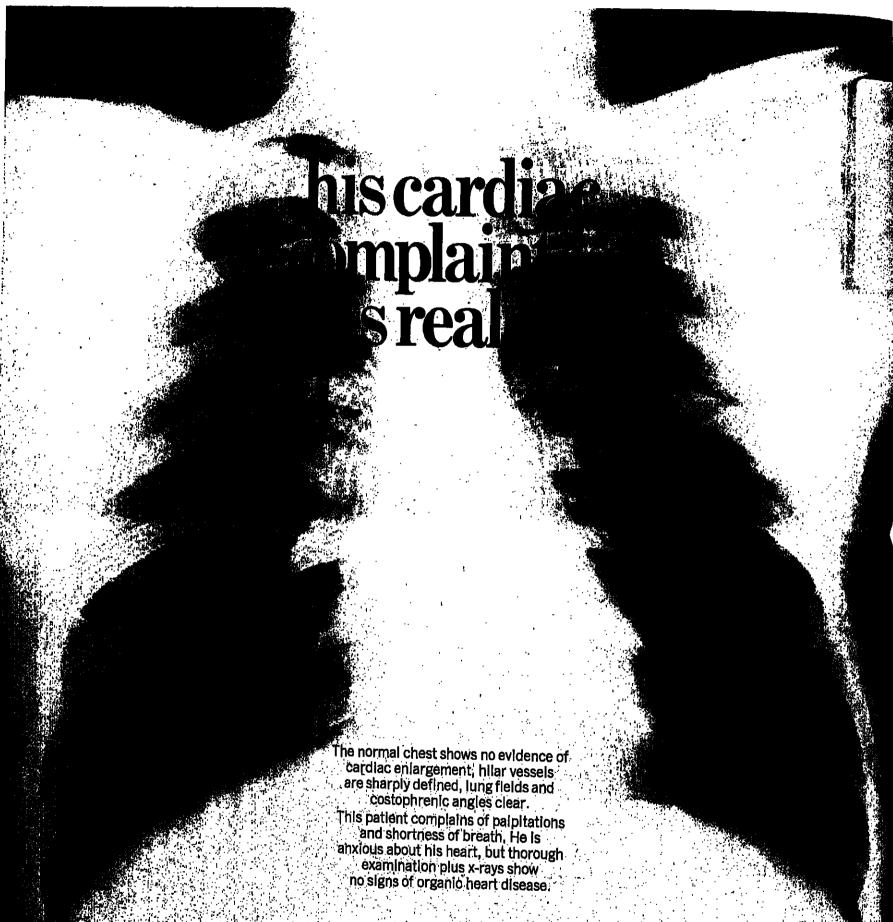
Librium (chlordiazepoxide HCl) is used concomitantly with certain specific medications of other classes use because of its wide margin of of drugs, such as cardiac glycosides, diuretics and antihypertensive

Librium (chlordiazepoxide HCI) is especially well suited for extended safety. In general use, the most common side effects reported have been drowsiness, ataxia and confusion, particularly in the elderly and debilitated. (See summary of prescribing information.) Moreover, the antianxiety benefits of Librium are

generally maintained without diminution of effect or need for increase in desage. When treatment is prolonged, periodic blood counts and liver function tests are advisable. Three dosage strengths are available for flexible, individualized therapy of various degrees of excessive anxiety in patients with functional or organic heart disorders.



Roche Laborationes Division of Halfmann-La Roche Inc. Naticy N.J. 07116



Before prescribing, please consult uct information. summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile. Contraindications: Patients with known hypersensitivity to the drug. Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requir-

operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing ege requires that its potential benefits be weighed

rist its possible hazards. Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and

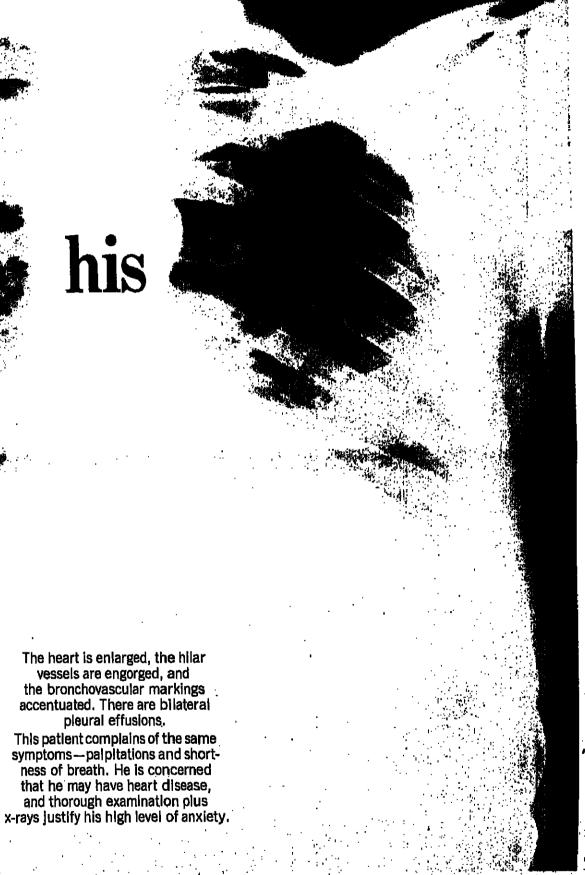
phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; sulcidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants;

established clinically. Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities,

causal relationship has not been

nausea and constipation, extrapyramidal symptoms, increased and decreased

libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy. Supplied: Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl.



For relief of moderate to severe anxiety associated with: cardiovascular symptoms

adjunctive Librium 10mg (chlordiazepoxide HCl)
1 or 2 capsules
1.i.d./q.i.d.

ATLANTIC CITY, N.J.—Children under five annually ingest an estimated 3,000,000 inedible products that "may or may not produce symptoms," according to Dr. Howard C. Mofenson, president of the American Association of Poison Control

Of these ingestions, only one in 50 is reported to an appropriate poison control center, he told the Section on Pediatrics at the 120th Annual Convention of the American Medical Association, Failure to report means the loss of valuable information on the toxicity, or lack of it, of swallowed objects, the majority of which are probably innocuous, he said; and the lack of this information on human toxicity means that "much of our knowledge must be based on the vague, variable LDbo of

He suggested that when an ingestion is reported, the first thing to do is to get the victim's telephone number and the exact spelling of the ingested object or substance, since package labels sometimes provide a clue to toxicity if they include one of the signal words: "Caution," "Warning," or "Danger." He also encour-

nged the reporting of all ingestions. To considerations of toxicity must be added an estimate of the volume swallowed by the youngster and of the emetic properties of the ingested substance.

"Since rodents are customarily used to determine the LD50 and rodents do not vomit this defendance of humans vomit, this defense mechanism of humans has been overlooked when comparing

Common Household Items

Adhesives (most)
Adhesives (most)
Ballpoint pen inks
Bathtub floating toys
Chloride
Bubble-bath soaps (detergents)
Caps (toy pistol) (potassium chlorate)
Cigarettes or cigars (nicotine)
Contraceplive pills
Contraceplive pills

Contraceptive pills
Crayons (marked A.P., C.P.)
Dehumidifying packets (silica or charcoal)
Deodorants
Pish house

Fish bowl additives
Golf ball (fluid core can cause mechanical

Ink (blue, black)
lpecae syrup
Matches (potassium chlorate)
Mucilage and paste
Paint—indoor (less than I per cent lead)
Play-Doh and modeling clays
Porous-tip ink-coating fluid

markers)

Porous-tip ink-marking and markers)
Putty (less 2-3 ounces)
Sachets (essential oils and powder)
Shampoos (liquid)
Shaving creams (soap, perfume, menthol)
boric acid)

Sweetening agents (saccharin, cyclamate)
Teching rings (water—? sterility)
Thermometer (mercury)
Tooth paste
Vitamins with or without fluoride
tarinic acid, gailic acid)

baric acid)

loaps (may cause vomiting)

Frequently Ingested

A. Nontoxic (usually)

injury)
Ink (blue, black)

B. Sometimes Toxic (in large amounts or if taken deliberately)

Sodium hypochlorite

p-Dichlorobenzene

or naphthalene

TOXIC INGREDIENT Aerosol spray Aftershave lotions Toluene Ethyl alcohol Hexachlorophene 3 per cent Airplane glue Alcohol drinks over I ounce

Bleach (household) bowl cleaner or an Candy laxatives

Colognes Deodorizer cakes Model cement Nail Polish removes Plastic cement

Toluene Acetone Suntan preparations

Chlorine Alcohol

rodent LD₅₀ to human toxicity," he said. items as batteries, cigars and cigarettes, His presentation included a table of detergents (except those for electric dish-"Frequently Ingested Common House- washers), inks, contraceptive pills, Silly hold Items" (see boxes) divided into those Putty, deodorants, thermometers (except that are usually nontoxic and those that for a small danger from broken glass), and sometimes are, if taken in large amounts many others.

Myocardial sensitization

GI Irritation

Relatively nontoxic

Relatively nontoxic

Pulmonary irritation

Hypoglycemia, intoxication Glue sniffling

Esophageal & G1 irritation

Hypoglycemia, intoxication

Hypoglycemia, intoxication

More than I tenspoonful

Glue sniffing
Hypoglycemia, intoxication
Aspiration pneumonia

Glue sniffing GI Irritation and

CNS depression

For Cancer Study Grant Medical Tribune Repon

BETHESDA, MD.-The National Canal stitute today issued a call for contin grant applications from nonprofit research institutions throughout the try. The deadline is November 1. tions will be given final review and asmendation by the National Mic. Cancer Council, and applicants all, notified of the results by April, 1972

The institute has allocated \$11,000 for construction grants from the \$1000 000 supplemental appropriation i. ceived from Congress at President Ku request in support of his call for 12 tional commitment for the conques cancer.

The Federal grants will provide it. cent of construction cost, the remini to be given locally.

To be eligible for a grant an insing must be actively engaged in canon scarch of high quality, the Nationals cer Institute announcement said.

Information on the procedure forfapplications is available from the to cinte Director for Extramural Acid

Age-Linked Immunologic Fall-Off Studied

WASHINGTON-There seems to be no doubt that the immune competence of some mainingly decreases with age. But can the same be said for an entire species? And is the decrease a causal factor in some agerelated diseases, not to mention senescence

"For most questions of that kind the data is so sketchy as to be no answer." said the chairman of a workshop on the subject at the first International Congress of Immunology.

Dr. Roy L. Walford, of the University of California at Los Angeles, said that even the solid experimental evidence for immunologic dwindling with age is confronted by "a paradox . . . in that a number of immunosuppressive regimens prolong life span."

Notable among these paradoxical examples are some of his own experiments with small fish, which can be made to live 50 to 100 per cent longer lives by keeping them in water 4 to 5° C, colder than normal. Although they grow faster and larger than normal their immunologic functions are suppressed, he said, judging from prolonged scale graft rejection times and re-quantitatively. A rodent, for instance, tative falling-off."

sponge to standard antigens, such as sheep erythrocytes.

Calorie restriction accomplishes a similar bfe-lengthening and immune suppression in mice, according to Dr. Walford. The odd aspect of that experiment is that the mice were from a cancer-prone strain. and a two-thirds reduction in calories from the time of wearing reduced their tumor incidence from the usual 60 per cent to 10 per cent. What is odd about it is that the reduction of an immunologic surveillance mechanism, particularly with aging, is customarily regarded as an invitation for a tumor "take," while in this case it seemed to prevent a tumor take.

Immune Fall-Off Documented

Aside from the paradoxes accompanying regimen-induced immunosuppression, however, there are some clear-cut examples of immune fall-off with age. Morphologically the thymus shows an involution to an extent that no other organ does with age.

Experiments reported by other investigators at the workshop here added to previous evidence that humoral immunity de-

often is less able to mount a humoral antibody response to standard antigens as it ages-and those antibodies it does produce are shifted in proportion between IgM and IgG globulins.

Data on cellular immunity are less broadly based, said Dr. Walford, and tend to be "very strain-dependent." A strain of mice susceptible to autoimmune disease undergoes a marked decline in immune function with age-e.g., between the 16th and 24th month of life but not sooner. Another strain not susceptible to autoimnune disease shows no subsidence of immune function by the 21st month but no data are known for greater ages or inlonger-lived strains.

Some other phenomena attributable largely to cellular immune mechanisms are related to age in some strains but not all. Skin, tumor, or other altografts may survive longer in older animals, and some of the cells from older animals show decreased ability to mount a graft-versushost reaction.

In sum, said Dr. Walford, "age-related alterations in the immune mechanisms clines, sometimes qualitatively as well as must be complex and not merely a quanti-



By Dr. Joseph Kler

HONORED BY URUGUAY as a bishop, physician, writer, and naturalist, Danaso A. Larranaga (1771-1848) was scion of a wealthy family.

In exile in Buenos Aires for political views, Dr. Larranaga provided medical ervices during the Spanish invasion of he city. He returned to Uruguay folowing its independence. Stamp was issued in 1921.

cortesy Minkus Publications, Inc., New York

Committee Finds No Data to Back **Anticancer Agent**

Medical Tribune Report Washington Bureau

WASHINGTON-An ad hoc committee of oncology consultants for review and evaluation of Lactrile (amygdalin MF) told FDA Commissioner Dr. Charles Edwards "there is presently no acceptable evidence of therapeutic effect" of the controversial anticancer drug.

Further, the committee said, there is "no justification at present" for the clinical trials proposed by the McNaughton Foundation of California.

Laetrile-a compound derived from apricot kernels-has been widely promoted in the United States and other countries, including West Germany and Mexico, as a cancer remedy. The promoters have attempted several times during the past 30 years to gain Food and Drug Administration approval for use of the drug in tests on human beings.

Committee Named Last May

The ad hoc committee was appointed by the FDA last May 21, with Dr. Albert Segaloff, of the Alton Oschner Foundation, as chairman. The group found that data in the present file do not fulfill minimal requirements for a decision with respect to human efficacy. It said it would welcome the opportunity to review material on human efficacy.

FDA said that it has asked Dr. Ernesto Contreras of Mexico and Dr. Hans Nieper of West Germany, two physicians with Lactrile experience, to provide the agency

with results of their tests. Referring to reports of success with the drug in patients in various clinics, the committee commented that "a favorable clinical experience may supply the justification for the initiation of a clinical trial but cannot substitute for a properly controlled clinical trial."

According to FDA policy reinforced by the ad hoc committee findings, Lactrile may not be promoted, tested, or sold in the U.S. under provisions of the Food, basic studies have been performed.

EPIGRAMS—Clinical and Otherwise

The cure of many diseases is unknown to the physicians of Helias, because they are ignorant of the whole, which ought to be studied also; for the part can never be well unless the whole is well. . . . This . . . is the great error of our day in the treatment of the human body, that the physicians separate the soul from the body.

Charmides, 156.B (tr. by Benjamin Jowett)

or deliberately. The nontoxic ones far out-His coauthor was Dr. Joseph Greensher, number the toxic ones. director of the Poison Control Center at National Cancer Institute, Bethesia ! Dr. Mofenson listed as nontoxic such the Nassau County Medical Center, N.Y. 20014.

Chess Problem Black

White to play and win, but how page 16. RP to be stopped? See

Indications Infections susceptible to erythromycin are primarily those caused by the gram-positive cocci—staphylococci (most strains), pneumococci and straptococci, including enterococci. Activity in vitre has been demonstrated against Hemophilus influenzas and Hemophilus pertuesis. It is also active against other pathogens such as Corynebacterium, Clostridium, Neisseria, Treponema pallidum and Mycoplasma pneumoniae (Eaton agent). It is advisable to establish the susceptibility of infecting pathogens when practical, Contraindication; Kopwa sensitivity to erythromycin. Precaptions, Side Effects: Side effects are infrequent compared with other antibiotics. Occasionially, abdominal discomfort, cramping, names or vomiting may occurrity galergic respinates (such as auticaria and other akin

encountered, appropriate countermeasures (a) epinephrine, ateroids, etc.) ahould be administrated the drug withdrawn. With prolonged or ropated of therapy, or especially when another anithoral administered concurrently, the possibility of nonsuaceptible bacteria, yeasts or mokas should occur, withdraw the drug and in rare; if it should occur, withdraw the drug and in appropriate treatment.

Administration and Bossge The dossge of Pedia should be adjusted to the needs of the individual treatment of the response of the patient determine dossge and days of therapy.

The resourmended dossge of Pediamych for interest of the resourmended dossge of Pediamych for interest of the patient determine dossge and days of the resourmended dossge of Pediamych for interest of the patient determine dossge and days of the resourmended dossge of Pediamych for interest of the patient determine dossge and days of the resourmended dossge of Pediamych for interest of the patient determine dossge and days of the patient dossge of Pediamych for interest of the patient determine dossge and days of the patient dossge of Pediamych for interest of the patient dossge of the patient dossge of Pediamych for interest

THE RED THROATS ARE COMING...

When your office fills with young patients... and you're seeing lots of streptococcal pharyngitis and tonsillitis plus pneumococcal otitis media and bronchitis...that's when Pediamycin is at its best. Pediamycin is therapeutically active against pneumococci, strepto-

cocci, staphylococci (most strains) and Mycoplasma pneumoniae. Note: When Group A beta hemolytic streptococci are isolated or suspected, therapy should be continued for 10 days. Culture and sensitivity tests should be undertaken whenever antibiotic therapy is

considered. When safety is a prime consideration in therapy... consider Pediamycin whose side effects are infrequent and usually minor compared to those of other antibiotics often used in

discomfort and mild allergic reactions have been encountered. Monilial overgrowth is rare. Pediamycin has not been implicated in tooth mottling, an especially important consideration in children under 8 years of age.

Pediamycin has not been associated with changes in liver function.

The erythromycin especially suitable for pediatrics Pediamycin suspension (60, 90 and 150 ml sizes) gives you an extra margin of regimen control. Its 10-day dating discourages parents from terminating treatment too soon, or saving leftovers for the next infection. And Pediamycin's cherry flavor keeps the young patient happy with his medication...if not the infection.

these infections. Serious allergic reactions are extremely rare. Occasional abdominal IT'S TIME FOR PEDIAMYCIN SUSPENSION (ERYTHROMYCIN ETHYLSUCCINATE, ROSS)

severity of the infection, is recommended. In fulminating or life-threatening infections, a parenteral form of crythronycin is preferred.
For prevention of rheumatic lover, rheumatic heart disease and glomerulonephritis, following streptococcal infections, therapeutic dosage of Pediamycin should continue for at least 10 days. In treatment of other systemic infections, therapy should continue for 48 hours or more after symptoms have subsided and temperature has returned to normal. In any case, therapy should continue long enough to minimize the possibility of recurrence. In localized infections, treatment with Pediamycin does not preclude the need for local mensures or surgery when indicated.
Supply: FOR INFANTS: Pediamycin Drops: crythromycin ethylsuccinate granules for oral suspension, chertyfiavored; 80 ml bottles, 100 mg of crythromycin activity per dropperful (2.5 ml), calibrated dropper included in package.

ror small outlers: Pediamycin Suspension: erythronycin ethylsyccinate granules for oral suspension, cherry-flavored, 60 ml, 90 ml, and 160 ml bottles, 200 mg crythronycin activity per teaspoonful (5 ml), full and half teaspoon measure included in

package.

For OHILDREN: Pediamycin Chewable: crythromycin ethylauccionte chewable tablet, accred, cherry-fiavored, 200 mg crythromycin activity. For professional identification each tablet boars the Ross R and list

ROSS LABORATORIES COLUMBUS, OHIO 43216 RORS Division of Abbott Laboratories, usa

Plato (4277-347 B.C.)



Avoid the complications of diuretic overdry

yet prompt

No one denies there's a time and place for a highly potent nonthiazide.

But most patients rarely need it. Which is why hydrochlorothiazide — originated by

CIBA as Esidrix — remains the most widely used oral diuretic.

With Esidrix you usually avoid the abrupt flushing out common with fastacting nonthiazides.

edema is relieved gradually over a 12hour period. Which is usually fast enough. Just as important, it's smooth and gentle.

Moreover, the risk of serious salt and water decade's use in loss is reduced.

However, since fluid and electrolyte imbalance may occur, patients should be watched closely for Diuresis is prompt; clinical signs (please see brief prescribing information).

Things are com-

plicated enough for the

edema patient. Rely on

Esidrix, the smooth,

larly in maintenance

as a diureticantihypertensive. Labeling for one newer nonthiazide states: "Hypertensive patients who cannot be adequately controlled with gentle diuretic. Particu-

Proven by over a

hypertension

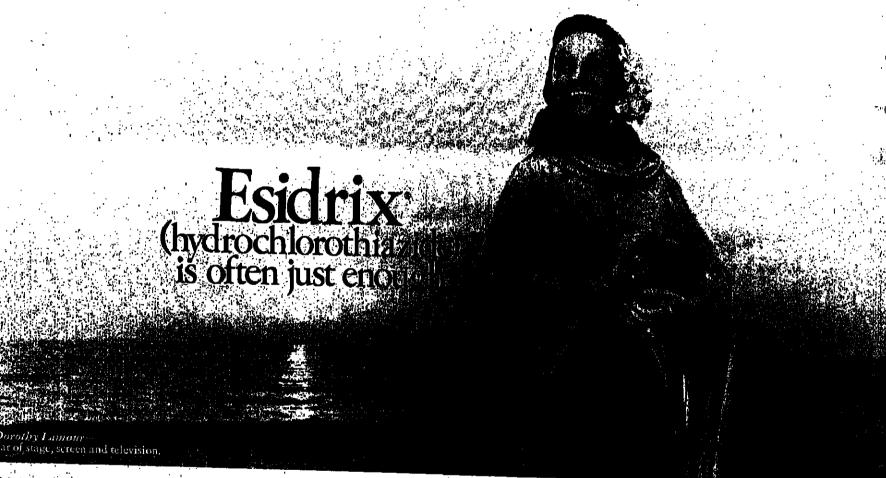
Esidrix

is still un-

surpassed

thiazides will probably also not be adequately controllable with [furosemide] alone."

And Esidrix is amply proven alone in mild hypertension. As an adjunct in mild to severe cases.



Esidrixe (hydrochlorothiazide)

Indications: Edema and hypercension. Contraindications: Aperia; discontinue drug if renei shurdown occurs for any reason, Progressive hepatic disease may accelerate development of hepatic coma. On not give to patients with known sileray to this idea or other sulfons midealed accelerate the sulfons midealed declared design.

derived drugs.

Warnings: Sinall bowel stenosis, with or without alceration, has been associated with use of enteric-coated this idea with use of enteric-coated this idea with use of enteric-coated this idea with use of enteric-coated poasshum, and with enteric-coated poasshum alone. These bowel lesions have caused obstruction, hamorrhage, and perforation; surgery was frequently tequired and deaths have occurred.

Although the incidence of these lesions is la hiw, and a causal relationship in man has not been definitely essablished, dustric-coated porassium salts have been implicated. Therefore, coated ponassium, containing formulations should be used only when diesary supplementation is not practical and discontinued immediately if abdominal pains distention, causes, yomiting or GI bleeding pictus. Lowering of blood pressure in hypertensive patients may sometimes result in nitrolen retention; in turn renal blood flow is reduced, particularly in those with impaired renal function. If progressive repairs in high distensive, discontinuance of drug pasy be destrable, in

pstienus with renal disease, thiszides may precipitate azotemia. Cumulative effects may develop in those with impaired renal function. Dosage should always be carefully titrated.

Pay special attention to electrolyte balance of patients with severe hepatic insufficiency. In patients with citrhosis drows icess, tremor) and test for increased attential ammonia concentration; sodium and potassium excretion. This xides may decrease glucose tolerance; use cautiously in disberica. Hyperuricemis may occur but it senerally excepted by

but is generally reversed by a urlcosuric but is generally reversed by a uricosuric agent.
Thiszides may decrease arterial responsiveness to norepinephrine and increase responsiveness to tubocurarine; if possible, withdraw thorapy 2 weeks prior to surgery. Hypotensive episodes under anesthesia have been observed. If emergency surgery is indicated, presnesthetic and anesthetic agents should be administered in reduced dosage.

The possibility of sensitivity reactions should be considered in patients with a history of allergy or bronchial assuma.

Use in Pressumer.

Use in Preguincy

Thiarides should be used with caution
in pregnant or isomiting patients since
this drug crosses the placental barrier
and appears in breast milk and may respit
in fetal hyperbilinabinemia, thrombo-

cytopenia, or altered carbohydrate memb-olism. It is therefore possible that the adverse reactions seen in the adult may occur in the newborn.

Precautions: Perform serum potassium, BUN, uric scid, and blood sugar tests prior to and at appropriate intervals during therapy. Watch patients for clini-cal signs of fluid or electrolyte imbalance cal signs of fluid or electrolyte imbalance (hyponatremia, hypochiloremic alkalosis, hypokalemia). Warning signs: dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardis, GI disturbance. Serum and urine electrolyte determinations are particularly important when patient is vomiting excessively; receiving parenteral fluids, setroids, or ACTH; during brisk divresis; in presence of severe cirrhosis.

Interference with adequate oral intake and dentil may be corrected with

ammonium chloride (except in those with hepatic or renal disease) and largely prevented by a nonrigid salt intake, If dietary salt is unduly restricted, especially during hot weather, in severely edematous patients with congestive bear fell. during hot weather, in severely edematous patients with congestive heart failure or renal disease, a low sait syndrome may complicate therapy with thiazides. Hyperuricemia (or frank gout) may be precipitated in certain patients. Insulin requirements in disbetic patients may be increased, decreased, or unchanged. Latent diabetes may become manifest during thiazide therapy.

If nitrogen retention indicates onset of renal impairment, discontinue drug,

Adverse Reactions: Gastrointestinal -Adverse Reactions: Gastrointestinal—
anorexia, gastric irritation, nausea, vomiting, cramping, distribea, constipation,
jaundice (intrabepatic cholestatic), pancreatitis, hyperglycemia, glycosuria.
Ceptral nervous system—dizziness; vertigp, paresthesias, headache, xanthopsia.
Dermatologic-hypersensitivity—purpura,
photosensitivity, tash, urticaria, necrotizing anglitis. Hematologic—leukopenia;
thrombocytopenia, agranulocytosis,
aplastic anemia. Cardiovascular—orthostatic hypotension may occur and may aplastic anemia. Cardiovascular — orthostatic hypotension may occur and may
be potentiated by alcohol, barbitutates,
or narcolics. Miscellaneous — muscle
spasm, weakness, resdessness. Whenever
adverse reactions are moderate or severe,
reduce deabe or withdraw therapy.

Dosage: Tablers should be raken with

or immediately after meals. EDEMA: Initial — 50 to 100 mg once or twice daily for several days. Maintenance—25 to 100 mg daily or intermittently Refrectory patients may require up a 150 mg daily.

dosage may be adjusted downward to as little as 25 mg or upward to as much as 100 mg daily. In resistant patients, up to 150 mg daily may be required. Combined therapy.—When necessary, other antihypertensives may be added gradually and with caution because of the potentiating effect of this drug. Dosages of ganglionic blockers should be halved. Supplied: Tabless, 50 mg (yellow. acored) and 25 mg (pink, scored); bottles of 100, 1000, and 5000. Consult complete literature before

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CIBA

Wednesday, September 29, 1971

Menical Tringen

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Medical Tribune

Medical News

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De Motu Cordis Updated

Harvey's oreat discovery was the circulation of the blood, but his classic lar morphology. book is titled De Motu Cordis-i.e., "motion of the heart." Necessarily relying on direct observation, Harvey studied the heart beating in "very little Fish...all the body of which is transparent," in chick embryos placed in warm water, and in mammalian dissections. That is at least one order of magnitude removed from the array of modern techniques applied to investigate the movements of the heart and blood.

The very names of current investigative methods are formidable-e.g., videoscintiscopic radioisotope anglocardiography, radiokymography, hiplane cineangiography, echocardiography, kinetocardiography, apex cardiography, electrokymography, roentgenkymography. Some of the newer procedures appear most promising.

Radioisotopic angiocardiography, developed by Dr. Joseph P. Kriss and colleagues at the Division of Nuclear Medicine of Stanford University, is particularly intriguing. As far as the patient is concerned. all that is required is the intravenous injection of a few cubic centimeters of technetium^{99m}-pertechnetate. The course of the injected radionuclide through the followed in precise detail by a scintillation

As described by Dr. Kriss and his colleagues in a detailed article in the June issue of Circulation, the procedure has a very broad scope of diagnostic applicability in heart disease, including congenital heart and valvular lesions, ventricular and aortic aneurysms, ventricular hypertrophy and cardiomyopathies, and pericardial ef-fusion. The method has permitted the quantitative assessment of such hemodynamic functions as cardiac output, chamber size, and blood flow as reflected by transit times; and quantitation appears feasible also of intracardiac shunts, myocardial contractility, and coronary blood flow. Contrast angiocardiography and cardiac catheterization, which are widely employed in diagnostic study of the heart are both "invasive" techniques with inconvenience and some hazard to the patient. The particular virtue of radioisotopic angiocardiography is its simplicity in addi-

tion to its versatility, Cardiac diagnosis has come a long way from palpation, auscultation, and the longfamiliar techniques of fluoroscopy and electrocardiography, although, combined with a good history, these still suffice in great vessels and chambers of the heart is most patients. Harvey would doubtless have been much intrigued to see how far camera and a variable time-lapse video- De Mou Cordis has come since his obserscintiscope, permitting recording, display, vations on transparent "little Fish."

Congratulations to the FDA

THE FOOD AND DRUG ADMINISTRATION being the first lawyer in the country to of Peter Barton Hutt as chief counsel. Mr. Hutt comes to the agency with a decade of intensive experience in Food and Drug law, specializing in this area during his years with a leading Washington law firm as chairman of the American Bar Association's Food and Drug Law Committee, and as a member of the Advisory Lawyers Committee to the Food and Drug Law Institute. It is, however, not only technical excellence that Mr. Hutt brings to his new tasks but practicality, liberalism, and humanitarianism as well. His frightened into using token dosage and i resentatives in the drafting of health-re- the FDA, rather than the disease." In lated legislation, mostly behind the scenes, commenting on this statement, Peter Barhave given him practical knowledge of the ton Hutt wrote simply, "One would hope vagaries of politics. His concern with sub- that this could be avoided." stance abuse has been long and lasting, he We wish him well.

should be commended for its choice establish in the courts the principle that the alcoholic is sick and should not be the subject of criminal law. Lastly, and perhaps most important as he takes office, Mr. Hutt has always been a believer in the Constitutional guarantee of basic rights for the individual, the right of the doctor to practice medicine with pride and freedom, and the right of both to live and work without mortal fear of government interference and reprisal. Dr. Walter Modell once wrote, "There is also a strong possibility that in the future, physicians will be

"Induced Traffic"

automatic sampling and analyzing of possibly all justified to test the apparatus blood gases and pH can well be what but inconceivably all useful to the patient! traffic engineers refer to as 'induced traffic' And if the hospital billing system were -i.e., the traffic not originally needing to looked into the same computer, the 349 use a new route but attracted by it. Until tests could add approximately \$5,800 to the result is known to be normal, who is .. the patient's bill." (Charles D. Cook, M.D., to say that just one more determination Automated Blood Analysis: Success or might not be useful? In one of the patients Excess? Pediatrics 48:1, July, 1971.)

CLINICAL QUOTE: "Another facet of described 349 determinations were done.



"One teaspoonfuil to be taken every full moon -and keep it out of reach of the children."

Diabetes Controversy— Continued

Editor, Medical Tribune:

It is my belief that the controversial report of the University Group Diabetes Program relative to the alleged acceleration of cardiovascular complications in adult-onset diabetics receiving tolbutamide and presumably all related sulfonylurea compounds—can be better understood in the light of a hasic issue. This concerns the role of the hyperinsulinized-diabetic state in the pathogenesis of ischemic (coronary) heart disease....

I have repeatedly stressed that the onset f angina pectoris or cardiac arrhythmias three or more hours after eating, especially during the night, is a hallmark of myocardial glucopenia, whether coronary occlusion is or is not demonstrable

My review of the U.G.D.P. report warrants pointing out the following observa-

1. The greatest patient cooperativeness relative to taking 1.5 Gm. tolbulamide daily ("highest level of adherence to study medication") was in the tolbutamide-treated group. Specifically, 74 per cent in this group took all of their study medication for at least 75 per cent of the follow-up periods during which they were under study. The corresponding percentages for the placebo and insulin groups only ranged from 45.3 per cent to 69.8

2. There was less hypoglycemia in the nsulin-treated groups due to the unequivocal modification of the assigned dosage for those patients receiving standard doses of insulin (26) and variable doses of insulin (49), as compared to only six modi-

fications for those receiving tolbutamide. 3. There was an obvious greater tendency to drug-induced hypoglycemia in the tolbutamide group, as evidenced by the per cent change of fasting blood glucose concentrations from the base line. Owing to the spontaneous intensification of inyears of working with Senators and Rep- treat patients in ways designed to assuage | sulinogenesis and dinbetogenic hyperinsulinism in many mild diabetics as the day advances, the tolbutamide effect undoubtedly was superimposed upon the individual's own increased elaboration of insumorning hours. Administration of the second close before the evening meal also is pertinent in this context.

4. The basic design of these studies than three hours, or concomitant insulin larvae. responses. One indirectly assumes that a sizable portion of this group did experience significant hypoglycemia, however, on the basis of the fact that an average of ... 20.4 per cent of all patients studied had a

than 100 mg, per cent.

5. The tendency to drug-induced hypoglycemia-both with oral medication and insulin—is further indicated by the fact that from 37.4 to 49 per cent achieved "good" levels of control-i.e., "70 per cent or more of all the patients showed GTT fasting blood glucose values less than 110 mg, per cent." In a real sense, therefore, the two insulin-treated groups cannot be considered as proper controls in terms of evaluating vascular complications.

In essence, this study underscores the continuing crudeness of our ability to define "control of diabetes." I continually find myself reminding diabetologists that diabetes mellitus is NOT a disease of the circulating blood glucose concentration. Rather, it is a disorder of energy metabolism on the tissue level. Accordingly, until we have some practical method for determining the latter, the clinician is best advised to guide his therapy according to what I have referred to as "enlightened clinical control."... It is my belief, based upon several decades of observation, consultation, and rescarch, that some of the most serious diabetic complications-especially retinopathy and neuropathy-are in no small measure attributable to insistence upon "strict control" and the vigorous use of drugs to achieve this goal at the cost of severe tissue glucopenia. . . .

Perhaps the most significant aspect of the U.G.D.P. study is the attention it has focused upon the many deficiencies in our understanding of the pathogenesis and rational treatment of diabetes mellitus.

> H. J. Roberts, M.D. Wost Palm Beach, Fla.

Dirty Wounds'

Editor, Medical Tribune:

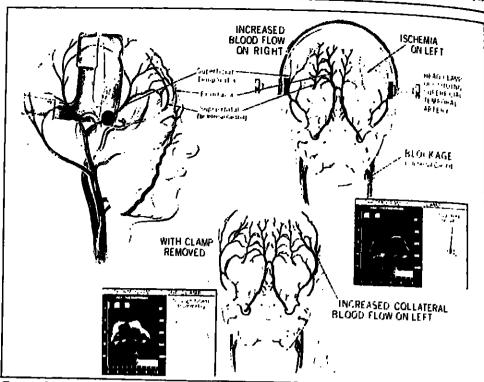
The action of the larvae of the common housefly (Musca domestica) in cleaning World War,

It was investigated in Britain where the housefly was bred under sterile conditions and the larvae deliberately sown onto dirty wounds. The maggets performed a perfect lin during the late evening and early débridement in that only necrotic and nonviable tissue was removed.

Further investigation showed that the maggots excrete large quantities of urea. Dressing moistened in a saturated aqueous failed to elaborate upon evidences of solution of urea were substituted and reactive hypoglycomia either by symp-similar results obtained without the astoms, glucose tolerance testing for more thetically unpleasant presence of the

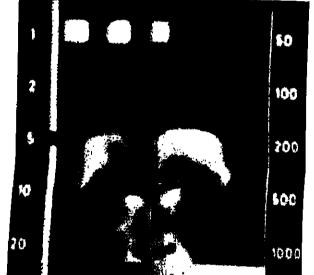
> DR. SHUTE, M.D., D.T.M. Director, Southern Branch Provincial Laboratory of Public' Health Calgary, Alta.

Prototype head clamp has adjustable rubber foot pads to promote bilateral occlusion of the superficial temporal arteries. Investigators took thermograms at least five minutes after application of this device.

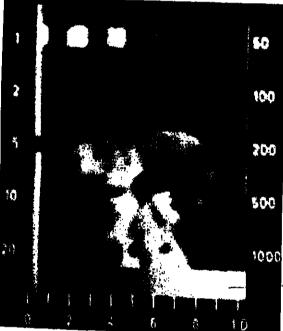


Composite drawing outlines mechanism by which superficial temporary artery clamping reveals hidden abnormalities. In thermogram at right, researchers injected hot water into cadaver via catheter inserted into left internal carotid artery. Thermograms with forehead temperature asymmetries of 0.7° C. or more were considered abormal in this study.





Patient with a left internal carotid stenosis. Thermogram was taken with standard method and does not show significant forehead temperature asymmetry.



Head clamp was utilized in this thermogram of the same patient. Cool area over left eye indicates decreased blood flow in the left internal carotid artery.

Greater ThermogreSensitivity Sought Four Basic Facilatterns Discerned In Carotid Occe Disease Cases

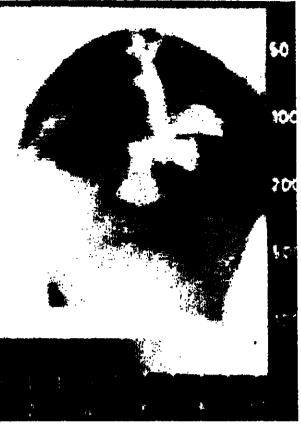
Basic patterns of abnormal facial thermograe studied by Dr. Terrance Capistrant, of St. Paul-Ramsey Hospital, St. Paul, to improve sensit this method for predicting carotid occlusive disease. In the project were 315 patients and 200 control, them had angiographically confirmed carotid disease. Of these 35, 31 were detected thermographically, one abnormal thermograms obtained from the latter subjects, by a combined field head clamp technique, were examined for char-

acteristic features.

Four basic facial copions were discerned: (1) medial forehead cooling, (2) a horizontal area one of the supraorbital ridge that resembled an asymmetric thickening of the w, (3) cooling of one side of the forehead, and (4) asymmetric cooling in egion supplied by the canthal and palpebral branches of the internal carotide he latter showed up more often in combination with other findings than along Though some there contained combinations of these, they never com-

prised more than two dec types.

The most frequent pattern seen in the head clamp thermograms was category 3, followed by contrasts with previous findings with standard thermograms, where I appuist often and 2 was also very common.







Primate Research Applied as a Key To Human Health

Over 100 scientists at the seven labs of NIH's Primate Research Centers Program collaborate with visiting investigators in finding solutions for human health problems. Under the institute's Division of Research Resources, these units are situated throughout the U.S. Their lo-cations and school affiliations are Oregon Regional Primate Research Center, Beaverton, University of Oregon; Washington RPRC, Seattle, University of Washington; New England RPRC, Southborough, Mass., Harvard University; Yerkes RPRC, Atlanta, Ga., Emory University; Delta RPRC, Covington, La., Tulane University; National Center for Primate Biology, Davis, University of California; and Wisconsin RPRC, Madison, University of Wisconsin.

Central nervous system, cardiovascular, and neonatal diseases, mental retardation, and reproductive biology are under study.



Proportional body measurements of 16-year-old with stunted growth are taken by Dr. Solish at the outputient clinic. In addition, he drew blood samples, took x-rays, and scraped thane cells from patient's month for the purpose of cytogenetic studies.

Genetics Counseling Seen as Part Of Trend to Preventive Medicine

ENETICS COUNSELING fits into the present trend towards preventive medicine, stresses Dr. George Solish, Associate Professor of Obstetrics and Gynecology and director of the newly established genetics counseling clinic at Downstate Medical Center, Brooklyn.

A feature of this clinic is close cooperation with other Downstate specialists - such as hematologists and surgeons - made ssary by the great variety of defects (some 1,400 of which are presently known, according to the director) found to have a genetic basis. The unit also serves to monitor congenital malformations due to pollution or drugs taken during pregnancy, says Dr. Solish.

Research and teaching are other functions of the clinic. It is supported by a grant from the Birth Defects Institute of the New York State Department of Health,



dermatoglyphic print from mother of 16-year-old boy. The with counseling facilities in a number of other states in an tests on patient's relatives who may be living in vicinity.



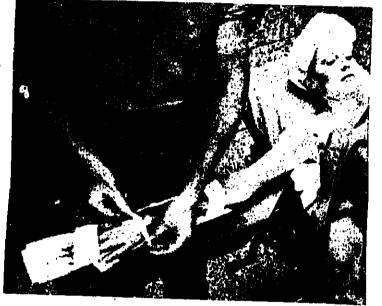
Union-made: Twice daily, physicians at the University-McCook Hospital in Hartford and the U.S. Veterans Administration Hospital in Newington gather for joint conferences on patients by way of a newly implemented two-way closed-circuit TV system, the first in Connecticut. They exchange questions and comments; charts and graphs can also be transmitted. This hook-up anticipates a network that will ultimately; it is hoped, link all of the state's hospitals with the University of Connecticut medical and dental schools and the Yale University School of Medicine.





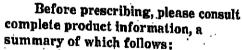


One to two hours before surgery, 10 mg Injectable Valium (diazepam) I.M.





surroundings and disturbing procedures. Perhaps best of all, Injectable



Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in: relief of skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; tetanus; status epilepticus and severe recurrent selzures; anxiety

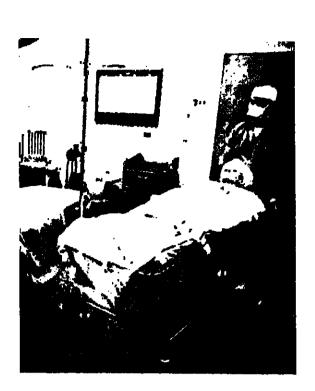
prior to gastroscopy, esophagoscopy, and surgical procedures; cardioversion (I.V).

Contraindicated: In infants; in patients with known hypersensitivity to the drug; in acute narrow angle glaucoma; may be used in patients with open angle glaucoma receiving appropriate therapy.

Warnings: Inject I.V. slowly, directly into vein; take at least one minute for each 5 mg (1 ml) given. Do not mix or dilute with other solutions or drugs. Do not add to I.V. fluids. Rare reports of apnea or cardiac arrest noted, usually following I.V. administration, especially in elderly or very ill and those with limited pulmonary reserve; duration is brief; resuscitative facilities should be

available. Not recommended as sole treatment for psychotic or severely depressed patients. Should not be administered to patients in shock, coma, acute alcoholic intoxication with depression of vital signs. Caution against hazardous occupations requiring complete mental alertness. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy,

Injectable Valium (diazepam)







can promptly calm, lessening anxiety and tension associated with strange





Premedication for surgery

Injectable Valium (diazepam) is a useful premedicant for reducing undue anxiety. Recall of preoperative procedures is markedly diminished. When given in conjunction with narcotics, a reduction of narcotic dosage should be considered. (See summary of prescribing information.) Injectable Valium should not be mixed with other drugs, solutions, or fluids. The new 10-mg disposable syringe can help you observe this precaution at the same time it helps assure aseptic handling. Injectable Valium seldom significantly alters vital signs. Nevertheless, there have been infrequent reports of hypotension and rare reports of apnea and cardiac arrest, usually following I. V. administration. Resuscitative facilities should be available.

To relieve excessive preoperative anxiety, remember Injectable Valium (5 mg/ml) 2-ml ampul, 10-ml vial, 2-ml disposable syringe.

Valium (diazepam) markedly diminishes recall of the preoperative procedure.

lactation or women of childbearing age, weigh potential benefit against possible hazard to mother and child.

Precautions: If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium, such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Not recommended for bronchoscopy, laryngoscopy, obstetrical use, or in diagnostic procedures other than

gastroscopy and esophagoscopy.
Laryngospasm and increased cough reflex are possible during gastroscopy; necessary countermeasures should be available. Hypotension or muscular weakness possible, particularly when used with narcotics, barbiturates or alcohol. Since effect with narcotics may be additive, appropriate reduction in narcotic dosage is possible. Use lower doses (2 to 5 mg) for elderly and debilitated. Safety and efficacy in children under 12 not established.

Side Effects: Drowsiness, fatigue, ataxia, confusion, depression, constipation, dysarthria, diplopia, headache, hypoactivity, hiccups, hypotension, incontinence, jaundice, nausea, changes

in libido, changes in salivation, phlebitis at injection site, urinary retention, skin rash, syncope, slurred speech, urticaria, tremor, vertigo, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported; should these occur, use of the drug should be discontinued. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy. Minor EEG changes, usually low-voltage fast activity, of no known significance.



Roche Laboratories Division of Hollmann-La Roche Inc. Nutley, N.J. 07110

benefits every step of the way.

Medical Tribune Report

ATLANTA, GA.—Two outbreaks of salmonellosis-one in Maine and the other in California-were reported here by the Center for Disease Control.

Thirty-three persons attending a christening in Kittery Point, Me., were served lunch on August 7, and within two days 17 of those who ate the meal became ill with gastroenteritis. Cultures of stool specimens from 14 were positive for Salmonella thompson.

Sixteen persons who ate chicken salad became ill, while only one of 12 who did not eat this food was similarly affected.

Ingredients of the chicken salad included home-grown lettuce and celery, mayonnaise, and three chickens, all purchased at a local supermarket. There were no ingredients or food samples left for laboratory analysis. Environmental cultures were all negative. There was no evident error in food handling or medical history to suggest recent salmonellosis in the food handler.

Fifty per cent of all nonhuman isolates of Salmonella thompson reported to the CDC in 1970 were obtained from chickens, it was noted. Boiling chicken for one hour should be sufficient to kill salmonellae. In this case, recontamination presumably occurred after it was boiled, though no specific handling error was

The other outbreak was due to Salmonella berta and occurred in June in Red Bluff, Calif. Approximately 200 ill persons were identified. Fifteen were hospitalized, and two elderly persons died.

Epidemiologic investigation revealed the vehicle of infection to be custard-filled pastries, particularly maple bars, processed and sold at a single bakery. The contaminated ingredient was unpasteurized.

The most often the specified tetracycline is now one of the least expensive.

Asthmatic's Breath Measured

At University Hospitals of Cleveland, Dr. Howard Schwartz, allergist-immunologist, demonstrates breathing measurement device to asthmatic patient. He is investigating effector mechanisms in immune responses.

frozen turkey eggs supplied only to that bakery. Three bakery employees and the owner of the turkey-breeding farm supplying the eggs were among those persons with stools positive for Salmonella berta.

Lipoprotein Study Funded

HOUSTON, TEX.-The John A. Hartford Foundation, Inc., has awarded Baylor College of Medicine and the Methodist Hospital a two-year \$289,572 research grant for studies of plasma lipoprotein and lipid transport, the arterial wall, and patterns of atherosclerosis. Dr. Antonio Gotto, Professor of Medicine at Baylor, will be the principal investigator. He will Sumana K. Devi, of NIH, and Dr. Joel Morrisett, of Stanford University.

Exercise to Bar Coronary Ills Held to Need Stress Testing

Continued from page 1

changes his life style, takes reasonable time for rest and relaxation away from his main occupations, finds other outlets that are enjoyable, makes whatever adjustments are necessary and possible in his home situation, one may hope to effect some improvement."

The very least that should be required in the way of stress examination is a Master two-step exercise test and proferably a double Master, Dr. Phibbs said. A monitored multistage excercise study is preferable, he added, and where facilities are available this should always be carried out as a prerequisite for participation in an exercise program, he added.

Evidence of myocardial ischemia often appears on the S-T segment of the stress electrocardiogram in patients who are completely asymptomatic and have normal resting electrocardiograms, he said.

"In my own experience with this particular finding," he said, "I would insist on a complete investigation, including coronary angiograms, before recommending any program of even moderate strenuous

The physician remarked that discussions of exercise in prevention of heart disease nearly always concern themselves with coronary heart disease. Exercise may also be of benefit in patients with chronic cor pulmonale, however, although it is almost never prescribed for this disorder, he maintained.

"It is time and past time," he stressed, "for the medical profession to investigate the early symptoms and signs of obstructive lung disease as carefully and with as much concern as it investigates the symptoms of coronary artery insufficiency. Here again, an exercise program may be be assisted by Drs. Richard Jackson and of great benefit and probably carries a much lower risk than in the patient with early coronary artery disease.

"Exercise in this group of patients improves functional capability in a very clear-cut and striking manner."

Organophosphorus Poisoning May Be on the Increase

From Wenatchee, Wash. The medical profession should be prepared to diagnose and treat increased poisoning from organophosphorus pesticides, according to Dr. Griffith E. Quinby, a toxocologist from Wenatchee, Wash.

The restriction of chlorinated hydrocarbon pesticides is leading to greater reliance upon the much more toxic organophosphorus compounds, and this will probably lead to an increase in death and morbidity from these chemicals, he ex-

Toxicity of Methotrexate To Liver Is Held Doubtful

Continued from page 1 however, did not differ significantly from untreated psorintics.

"Results of the study do not suggest abandoning methotrexate as a treatment of severe psoriasis," Dr. Zachariae emphasized, "but may stimulate a wider use of liver biopsy in the control."

Multifocal necrosis of the liver has presly been reported in psoriatics on methotrexate, he said, but until now it has not been investigated in a prospective study. "Among our patients," he said, "focal necrosis was found with equal frequencies in psoriatics on and without methotrexate."

Dr. Zacharlae remarked that there is no doubt that intermittent treatment with methotrexate is far less toxic to the liver than continuous treatment in low dosages. His doses were 25 to 50 mg. once weekly, administered intramuscularly.

All of Dr. Zachariae's patients receiving methotrexate displayed an increase in setum glutamic pyruvic transaminase, demonstrating, he commented, that this rise is an almost normal finding during methotrexate treatment.

In patients with occupational exposur to organophosphates who present with signs of parasympathetic overstimulation, a history of overexposure should be obtained but, if necessary, treatment of supportive nature should begin before the history is obtained, Dr. Quinby reconmended. Treatment should never be de layed until laboratory confirmation is obtained, he warned.

Respiratory maintenance is the most important part of therapy, he said. Art. ficial respiration should be given when required, including tracheostomy and positive-pressure ventilation if respiratory failure is not later relieved by antidote

Atropine sulfate should be given intravenously as soon as cyanosis is overcome, but not until then. Intravenous pralidor. ime chloride is a specific antidote and sometimes gives dramatic results, Finally, other symptomatic treatment can be given and skin, hair, and clothes decontant nated, the toxicologist said.

Respiratory Snags Seldom Tiel To Major Black Lung Signs

From W. Va. University

► Coal workers' pneumoconiosis is assa ciated with minor impairments in respintory function, but by themselves them respiratory deficits are seldon associated with significant symptoms or respiratory disability, the meeting was told by Dn. W. Keith, C. Morgan, N. LeRoy Lapa and Anthony Scaton, of the West Virgini University School of Medicine.

However, the addition of these about malities to those caused by another mild unrelated pulmonary disease, such as chronic bronchitis, may result in the patient's developing symptoms that he would not have were only one disease pressa, they said.

Studies of several groups of coal maga with simple coal workers' pacumocontes found that their residual volume is often larger than predicted, that minor about malities of gas exchange are often present. that the mechanical properties of the lung are occasionally altered, and that in about 50 per cent of subjects lung compliance decreases with increased frequency of respiration, the investigators reported.

Bubonic Plague Case Reported in Oregon

Continued from page 1 his antibiotic was changed to streptomycin, 1.5 Gm. daily in three doses.

The organism was sent to the Oregon State Board of Health Laboratories and on August 10 was reported as presump tively positive for Yersinia pestis by the fluorescent antibody technique. This identification was subsequently confirmed by the Zoonoses Section, Ecological Investigations Program, Fort Collins, Colo.

From July 27 to August 4, the boy had resided at a cabin near a small private lake in a remote part of northeast Oregon, approximately 100 miles from the area of the last reported plague case in 1970.

The patient denied any known contact with rodents, although chipmunks, free squirrels, and wood rats are abundant of these animals was apparent to either the boy or any of his family members. He was unaware of any flea bites and was not certain of the cause of the toe lesion.

The other 10 children and two adults who were living at the cabin have remained well.

Chess Solution

White wins by: 1 K-N7!, P-QR4; 2 K-R6, P-QR5; 3 K-R5, P-QR6; 4 K-R4, P-QR7; 5 K-N3, threatening 6 N-K6 mate. So Black must play 5 K-Q5; 6 KxP. KxP; and eventually all his other pawns will also be captured.



has a system that wins

She has a system that wins. Thanksgiving dinner for eleven. And she handles everything beautifully, wins lots of

compliments. She has another system for her hypertension. And that also in mind? works beautifully. It includes Ser-Ap-Es.

More than just another antihypertensive, Ser-Ap-Es can be a whole medication plan for

living with hypertension.

A "recipe" for comfort?

Correct. Because Ser-Ap-Es controls blood pressure effectively; dosage of each compo-

Designed with the kidney

Hydralazine maintains or increases renal blood flow. And the brain too?

Hydralazine also relaxes cerebral vascular tone. And reserpine has beneficial calming action.

Can she serve herself some "goodies"?

Well, hydrochlorothiazide does eliminate excess salt and water. That may mean less rigid

dietary restriction of salt. Will it take a big bite out of

On the contrary, Ser-Ap-Es means single-prescription economy.

Is it easy to stay with? Quite. Ser-Ap-Es offers all the antihypertensive medication many paffents need in one tablet. It's simpler, encourages

cooperation. Ser-Ap-Es supplies many

kinds of benefits... Only Ser-Ap-Es adds Apresoline (hydralazine) to rauwolfia-thiazide.

Ser-Ap-Es® reserpine 0.1 mg hydralazine hydrochloride 25 mg

a system for living with hypertension

INDICATIONS: All cases of hypertension except the mildest and the most severe. CONTRAINDICATIONS Reserpine: Known hypersensitivity; mental de-pression, especially with suicidal tendencies; active peptic uicer, uicerative collits.

Hydralazine: Hypersensitivity, coronary artery disease, mitral valvular rheumatic heart disease. Hydrochiorothiazide: Anurie; progressive repai, or hepatic disease; allergy to thiazides or other sulfonamide-derived drugs.

WARNINGS
Reserpine: Withdraw reserpine 2 weeks before surgery, if possible. For emergency surgical procedures, give vegal blocking agents parenterally to prevent or reverse hypotension and/or bradycardia.

Electroshock therapy should not be given to pa-ilents receiving rauwoifia preparations, since savere and even fatal reactions have been re-ported. Discontinue for 2 weeks before giving electroshock therapy. Hydralazina; Hydralazina, particularly if given for prolonged periods, may produce an arthritis-like

syndrome, leading in rare instances to a clinical picture simulating acute systemic lupus erythematicsus. Most of these reactions are reversible upon withdrawal of therapy. These side effects are not anticipated even with maximal recommended desage of Ser-Ap-Es.

Hydrochlorothlezide: Small bowel stenosis, with or without ulceration, has been associated with use of enterio coated thiszides with potassium, and with enterio coated thiszides with potassium should be used only when dietary supplementation is not practical and discontinued it gastrointestinal symptoms arise.

Fig. 16. A statement of the content of the content

In entary the relation of the street of the

reduce 1d Wages The possibility of sensitivity relations is needed to considered in patients with a history of a large enbe only at authors.

Use in Pregnancy
Recognition. The hately of hatewall a preparation to
the use on pregnancy continues at a country of the enestable had therefore, this dray once of the une onpregnant patients varily when in the public entropial
the physician, it as each under one of a forthewallance of the patient.

Hedralazino, Allbouch there has be entropations experience with hydrodyne in prepriativy, there have been no systematic animal reprinted to thidies to support the idea of cately ingregions, The drug chould be used a program your and in the judgment of the player on, it is deemed expending to the walture of the pallets.

experience to reweather a wind a west that the rest with Caution in program or the fating patients since this dring crystes, the placental barrier and appears in the act milk and to greatly or fall or beful by perfoliciture man. The only depends or allered carbohydrate metabolism if is there lore possible that the adverse rese from seven in the adult may according to be contributed.

PRECAUTIONS

Rescriptive the cautiously in patients with listory of poptic picer, picerable colles, or other GI disorders. May precipitate bilary color, in patients with gallsbones

with gaustines

Discontinue at list sign of mental depression
keeping or mind possibility of suicide. Use with
extreme caution in those with history of mental
depression. Take special care with asthmatics and
in hypertensives with renal insufficiency. Use cautiously with digitals, quinidine, and guanethidine.
Not recommended for aprilic insufficiency.

Hydralazine: Use cautiously in suspected coro-

Peripheral neuritis, evidenced by paresthesias, numbness, and tingling, has been observed. Published evidence suggests an antipyridoxine effect and addition of pyridoxine to the regimen it symp-

Blood dyscrasias, consisting of reduction in hemo-globin and red cell count, leukopenia, agranulocy-tosis, and purpura, have been reported rarely. If such abnormalities develop, discontinue therapy. Periodic blood counts and liver function tests are

Periodic blood counts and liver function tests are advised during prolonged therapy.

Hydrochlorothiazide: Monitor indicated blood chemistry and fluid and electrolyte balance carofully in patients on thiazide therapy, especially when patient is vomiting, receiving parenteral fluids, steroids, or digitalis. Supplemental potassium and nonrigid saft intake will help prevent hyponatremia. hypochloremic alkalosis, and hypokalemia.

ADVERSE DEACTIONS

ADVERSE REACTIONS

ADVERSE REACTIONS
Reserpine: Increased salivation, increased gastric
secretions, nausea, vomiting, anorexia, aggravation of peptic ulcer or ulcerative colitis, increased
intestinal motility, diarrhea, angina-tike syndrome,
ectopic cardiac rhythms particularly when used
concurrently with digitalis, bradycardia, flushing,
and mental depression, drowsiness, lassitude,
nervousness, paradoxical anxiety, rightmares
(which may be an early sign of mental depression),
rarely atypical Parkinsonian syndrome, central
nervous system semsitization (manifested by dull
sensorium, dealness, glaucoma, uveitis, and optic
atrophy), pruritus, skin rash, dryness of mouth,
dizziness, headache, syncope, epistaxis, purpura
due to thrombocytopenia, asthma in susceptible
persons, nesal congestion, weight gain, impotenca
or decreaseal libido, enhanced susceptibility to
colds, dysurta, conjunctival injection, dyspnes,
muscular achos.

muscular achos.

Hydralazine: Common: Headache, paipilations, anorexia, nausea, vomiting, diarrhea, tachycardia, angina pectoris.

angina pectoris.

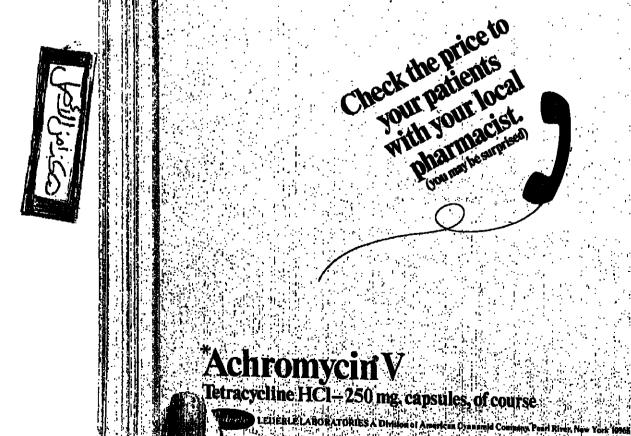
Less frequent: Nasal congestion; flushing, lacrimation; conjunctivitis; paresthosias; edema; dizziness; tremora; muscle cramps; paycholic reactions characterized by depression, disprientation or anxiety; hypersensitivity reaction including skin rash and vascular collapse; constipation; difficulty in micturition; arthrolgia; dyspnea; paralytic ileus; lymphadenopathy; splenomegaly.

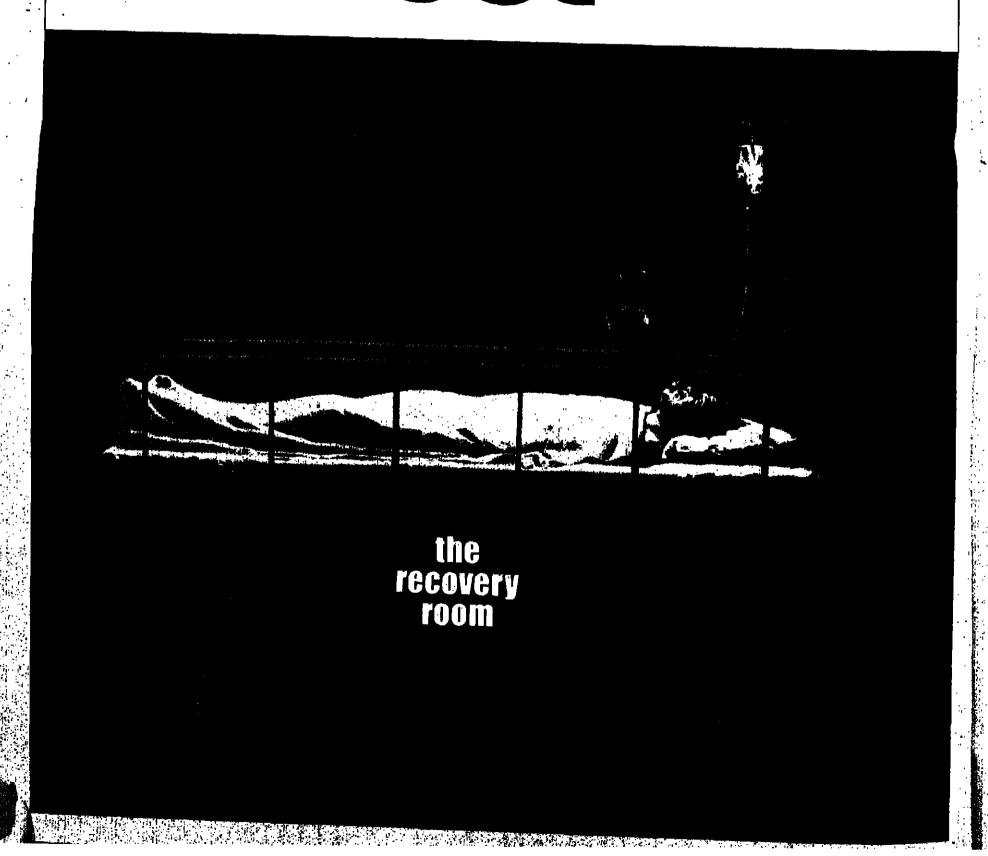
lymphadenopathy; splenomegaly. Hydrochloralhlaxide: Anorexia, gastric irritation, nausea, vomiling, cramping, diarrhea, constipation, gandlea (intrahepatic cholestatic), pancreatitis, hyperglycemia, glycosuria, dizziness, vertigo, paresthesias, headache, xanthopsia, purpura, photosensitivity, rash, urticaria, niecrotizing angitis, leukoponia, thrombocytopenia, agranulocytosis, aplastic anamia, muscle spasm, waskness, restiesaness. Orthostalic hypotensian may occur and may be potentiated by alcohol, barbiturates, or narcotics. Whenever advarso reactions are moderate or severe, reduce dosage or withdraw therapy.

DOSAGE: One or 2 tablets Ltd. To initiate therapy, 1 tablet t.t.d. is recommended. For maintenance, adjust dosage to lowest patient requirement. When necessary, more potent antihypertensives may be added gradually in dosages reduced by at least 50 percent.

SUPPLIED: Tablets (salmon pink, dry coated), each containing 0.1 mg reserbine, 25 mg hydrata-zine hydrochloride, and 15 mg hydrochlorolhia-zide; bottles of 100 and 1000.

Consult complete literature before prescribing: CIBA Planmaceutical Company Division of CIBA-GBIGY Corporation Summit, New Jersey 07901





Confirms the value of Talwin in the hospital and in private practice

analgesic efficacy comparable to meperidine and morphine with a minimum of significant adverse effects

In postoperative patients: less circulatory depression with Talwin

In a double-blind study of 342 postop patients, circulatory depression occurred in 13.2% of 174 patients receiving morphine, as compared with 5.4% of 168 patients receiving Talwin.1

...and in other patients: less respiratory and circulatory depression with Talwin

in a double-blind study of 3 narcotic analgesics and Talwin in 118* patients with suspected acute myocardial infarction, Talwin caused a significantly lower incidence in the fall of systolic blood pressure than the 3 narcotics when the initial pressure was 120 mm. Hg or higher. Unlike the narcotics, Talwin caused a statistically significant rise in the systolic blood pressure of patients with initial pressures of less than 120.2

In a study of a series of patients given Talwin or meperidine while anesthetized for surgery, the investigators concluded: "It would therefore appear that pentazocine is a much safer drug in respect of respiratory depression than pethidine [meperidine], particularly when repeated injections are to be given, e.g. postoperatively or in obstetric practice."3

...and less of the other adverse effects associated with narcotic analgesics

Compared to morphine, Talwin is relatively free from urinary retention and constipation.

is less likely to cause nausea, vomiting and diaphoresis than meperidine.

Available in 3 dosage strengths—all within the range of recommended dosage. Taiwin is available in 30 mg., 45 mg., and 60 mg. strengths to provide analgesia specific to patients' needs throughout the course of therapy. Most studies indicate that the higher dosage strengths produce little, if any, increase in the incidence of adverse reactions.

References: 1. Wallace, George: Int. Surg. 53:135, Feb. 1970. 2, Scott, M. E. and Orr, Rosemary: Lencet 1:1065, May 31, 1989. 3, Davie, I., et al.: Brit. J. Anaesth. 42:113, Feb. 1970.

*Other drugs studied: dismorphine and methadone.



injectable Talwin* brand of pentazocine (as lactate) Anaigesic for parenteral use

· lolerance to analgesic efficacy has not been observed

· not subject to marcotic controls Contraindications: Talwin should not be administered to patients who are

Contraindications: Talwin should not be administered to patients who are hyporsensitive to it.

Warnings: Head Injury and Increased Intracranial Pressure. The respiratory depressant effects of Talwin and its potential for elevating cerebroopinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions, or a preexisting increase in intracranial pressure. Furthermore, Talwin can produce effects which may obscure the clinical course of patients with head injuries, in such patients, Talwin must be used with extreme caution and only if its use is deemed essential.

Usage in Pregnancy. Safe use of Talwin during pregnancy (other than labor) has not been established. Animal reproduction studies have not demonstrated teratogenic or embryotoxic effects. However, Talwin should be administered to pregnant patients (other than labor) only when, in the judgment of the physician, the potential benefits outweigh the possible hazards. Patients receiving Talwin during labor have experienced no adverse effects other than those that occur with commonly used analgesics. Talwin should be used with caution in women delivering premature infants.

Drug Dependence. Special care should be exercised in prescribing pantazocine for emollonally unstable patients and for those with a history of drug misuse. Such patients should be closely supervised when long-term therapy is contemplated. There have been instances of psychological and physical dependence on Talwin in patients with such a history and, rarely, in patients without such a history. Abrupt discontinuance following the extended use of parenteral Talwin has resulted in examptoms such as abdominal cramps, elevated temperature, rhinorrhea, restlessness, anxiety, and lacrimation. Even when these occurred, discontinuance has been accomplished with minimal difficulty. In the rare patient in whom more then minor difficulty has been encountered, reinstitution of parenteral Talwin with gradual withdrawal has amellorated the patient's symptoms. Sub

drug in anticipation of pain rather than for the relief of pain.

Just as with all medication, the oral form of Talwin is preferable for chronic administration.

Acute CNS Menitesiations. Patients receiving therapeutic doses of Talwin have experienced, in rare instances, halfucinations (usually visual), discrientation, and contusion which have cleared spontaneously within a period of hours. The mechanism of this reaction is not known, Such patients should be very closely observed and vital signs checked, if the drug is reinstituted it should be done with caution since the acute CNS manifestations may recur.

Usage in Children, Because clinical experience in children under twelve years of age is limited, the use of Talwin in this age group is not recommended. Ambulatory Patients. Since sadation, dizxiness, and occasional suphoris have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Precautions: Certain Respiratory Conditions. The possibility that Talwin may cause respiratory depression should be considered in treatment of patients with brofichial asthma. Talwin should be administered only with caution and in low dosage to patients with respiratory depression (e.g., from other medication, uremis, or severe infection), obstructive respiratory conditions, or cyanosis. Impaired Renai or Hepatic Function. Although laboratory tests have not indicated that Talwin causes or increases renat or hepatic impairment, the drug should be administered with caution to patients with such impairment, Extensive vilver disease appears to predispose to greater side effects (e.g., marked apprehension, anxiety, dizziness, alsepiness) from the usual clinical dose, and may be the result of decreased metabolism of the drug by the liver.

Myocardial infarction. As with all drugs, Talwin should be used with caution in patients who may be a metabolism of the drug by the liver.

Patients Receiving Narcotics. Talwin is a mild narcotic entagonist. Some patien

Adverse Reactions: The most commonly occurring reactions are: nauses, dizzi-

Adverse Resctions: The most commonly occurring reactions are; nauses, dizzinass or lightheadedness, vomiting, euphoria. infrequently occurring reactions are—respiratory: respiratory depression, dyspnes, transient apnes in a small number of newborn infants whose mothers received Talwin during labor; cardiovascular: circulatory depression, shock, hypertension; CNS effects: sedation, atteration of mood (nervousness, apprehension, depression, floating feeling), dreams; gastrointestinei: constipation, dry mouth; dermatologic including local: dispincesia, ating on injection, flushed skin including plethors, dermatilis including prurities; other: urinary retention, headache, paresthesia, alterations in rate or strength of uterine contractions during labor.

Barely reported reactions include—neuromuscular and psychiatric; muscle

during labor.
Rarely reported reactions include—neuromuscular and psychiatric: muscle tremor, insomnia, discrientation, hallucinations; gastrointestinal: taste atteration, diarrhea and cramps; ophthalmic: blurred vision, nystagmus, dipiopla, miosis; other: tachycardia, nodules and ulceration at injection site, weakness or faintness, chills, moderate transient eccinophilia, allergic reactions including

adema of the face. See Acute CNS Menilestations and Drug Dependence under WARNINGS.

See Acute CNS Menilestations and Drug Dependence under WARNINGS.
Dosage and Administration: Adults, Excluding Patients in Labor. The recommended single parenteral dose is 30 mg. by intramuscular, subcutaneous, or intravenous routs. This may be repeated every 3 to 4 hours. Doses in excess of 30 mg. Intravenously or 60 mg. Intramuscularly or subcutaneously are not recommended. Total daily dosage should not exceed 360 mg. As with most parenteral drugs, when frequent daily injections are needed over a prolonged period, intramuscular administration is preferable to subcutaneous. In addition, constant rotation of injection sites (e.g., the upper outer quadrant of the buttooks, mid-lateral aspects of the thighs, and the delicid areas) is recommended. Patients in Labor. A single, inframuscular 30 mg. dose has been most commonly administered. An infravenous 20 mg. dose has given adequate pain relief to some patients in labor when contractions become regular, and this dose may be given two or three times at two- to three-hour intervals, as needed. Children Under 12 Years of Ags. Since clinical experience in children under twelve years of age is limited, the use of Talwin in this age group is not recommended.

recommended.

CAUTION, Talwin should not be mixed in the same syrings with soluble barbiturates because precipitation will occur.

Overdosage: Manifestations. Clinical experience with Talwin overdosage has been insufficient to define the signs of this condition.

been insufficient to define the signs of this condition.

Treatment. Oxygen, intravenous fluids, veropressore, and other supportive measures should be employed as indicated. Assisted or controlled ventilation should also be considered. Although najorphine and levellorphan are not effective antidoles for respiratory depression due to overdosage or unusual sensitivity to Taiwin, parenters indicates (Narcano, available through Endo Laboratories) is a specific and effective antigoniet. If naioxone is not available, parenteral administration of the antiseptio, methylphenidate (Ritalino), may be of value if respiratory depression occurs.

Taiwin'is not subject to narcotic controls.

How supplied: Amouls of 1 ml. (30 ms.) 114 ml. (45 ms.) and 9 ml.

Taiwin'te not subject to narcotic controls.

How Supplied: Ampuls of 1 mi. (30 mg.), 1½ mi. (45 mg.), and 2 mi. (60 mg.), each 1 mi. containing Taiwin (brand of pentazocine) as isotate equivalent to 30 mg. base and 2.8 mg. sodium chloride, in water for injection. Boxes of 10, 25, and 100.

Multiple dose visis of 10 mi., each 1 mi. containing Taiwin (brand of pentazocine) as isotate equivalent to 30 mg. base, 2 mg. accione sodium bisulfite, 1.5 mg. sodium chloride, and 1 mg. methylparaben as preservative, in water for injection. Boxes of 1.

The Ni of Taiwin solutions is aditiated between 4 and 5 with lactic and and tion. Boxes of 1.

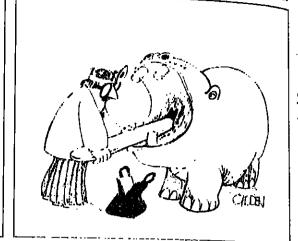
The pH of Telwin solutions is adjusted between 4 and 5 with lactic sold and sodium hydroxide. The air in the ampuls and viets has been displaced with

Winthrop Laboratories, New York, N.Y. 10016









New from

URISPAS® 100 mg. Tablets

flavoxate HCI

Urinary spasmolytic

China's Barefoot Doctors Take Care to Labor Therapy Possible

mentary training in medicine and health protection, they frequently add age-old Chinese medical techniques.

By thus combining modern medicine with such treatments as acupuncture, massage, and herbal prescriptions, they are often able to handle difficult as well as

Probably the main service they provide is the development of better social and personal hygiene. Following Mao Tsetung's instructions to put prevention first, they lead the fight against flies, cockroaches, bugs, fleas, and the snails that have devasted whole areas of the ricegrowing areas of south China.

Tung Tai-ho, a barefoot doctor from Shunyi county, is often cited by officials as an example of outstanding zeal in this respect. He organizes regular checks on water supplies and visits the homes of all commune members regularly to spray insecticides. He also teaches fellow members of the commune how to prepare herbal

With a population exceeding 700,000. 000 people, China is desperately short of medicine and medical equipment. Yet officials report that more than 1,000 small pharmacles have been set up around Peking, using almost exclusively the medicinal herbs and acupuncture techniques that the barefoot doctors are substituting for the more sophisticated medical practices of the West.

In the Chiang Tai people's commune. on the western outskirts of Peking, 19year-old Wang Lec-hun typifics the bare- standard ratio for barefoot to regular foot doctor. Born and raised in the area, doctors. Dr. Chou, a plump middle-aged



Herbal remedies and massage are employed by many barefoot doctors in bringing medical sid to workers and peasants. Above, a production brigade examines medicinal plants.

she now works as an assistant to Dr. Chou woman from Peking, volunteered to work Hua-chin, the commune's woman doctor, in the countryside a year ago. and her aim is to become a fully trained physician. Working with Dr. Chou and getting practical training with the peasants in the fields will, she told a recent visitor, eventually equip her for her desired career and perhaps give her better training than if she had spent six years in medical

Sixteen barefoot doctors work in the Chiang Tai commune, but only four are assigned to Dr. Chou's clinic. This is the

In Infants at Risk **Of Brain Bleeding** Medical Tribune Report

peutic measures may exist for newborn infants at high risk of intracranial hemor. 🧈 rhage, a group of Vanderbilt University School of Medicine investigators reported here at the 18th annual meeting of the Society of Nuclear Medicine.

The group was headed by Dr. A. Bertrand Brill, head of the medical school's Division of Nuclear Medicine and Bio-

Because of the potential usefulness of

They found that most of the infants' exist. . . . "

brigade served by the clinic. Apart from a small token payment, treatment is given The time of intracranial bleeding for The clinic itself is housed in a small one-room cottage with an earthen floor. The walls are whitewashed and the equipment limited to a few bare wooden chairs, a threadbare couch, and one small, roughly made medicine cabinet. The cabinet the clot were obtained. contains a bare minimum of drugs, and

The amounts of Cr50 and natural iron

For these 28 infants, 16 were diagnosed as hyaline membrane disease, seven were extremely immature, and the rest died of other disorders. The median age at death was 33.2 hours, the median age at tagging

Twenty-two hemorrhaged after tagging-

If the minimum fraction of the clot showing the tagged red blood cells was 70 per cent or greater, it was concluded that the hemorrhage occurred after tagging, the investigators explained. If the minimum fraction was less than 70 per cent but more than 30 per cent, then bleeding might have occurred both before and after cessity, the barefoot doctor program has than 30 per cent, the hemorrhage occurred tagging. If the minimum fraction was less prior to tagging.



Los Angules-The possibility of thers-

therapy in infants considered at high risk of intracranial bleeding, they said they investigated the time of bleeding to see if it occurred in utero or too early post partum for therapy to be initiated.

intracranial bleeding occurred "after bith and after their disease process was clearly established." Therefore, they said, "the "production brigades," the basic unit for possibilities for therapeutic measures may

Time of Blooding Investigated

the newborns was investigated in relation to the time they were infused with red cells tagged with the stable tracer Cr50, usually prior to 12 hours of age, they said. If the infant died and an intracranial hemorrhage was found at autopsy, samples of

in the infant's blood and clot samples were quantitated in vitro by neutron activation analysis, they noted. Since Cr50 was used as the red blood cell tag, there was no hazard to the infant from ionizing radia-

When operations need to be performed, patients are sent to the eight-bed commune The group reported that it had tagged hospital, which has a staff of doctors and 132 high-risk newborns. Forty-three of nurses. More difficult cases are sent to the these infants died, and autopsies were performed on 36. Twenty-eight were found to have intracranial hemorrhages.

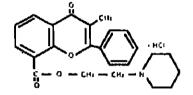
22 Hemorrhaged After Tag

In four infants, part of the hemorrhage occurred before tagging and part afterwards. In two infants, the hemorrhage occurred before tagging.

Cosuthors were Dr. Mildred Stahlman. Stan Swanstrom, G. Paxelius, Norman C. Dyer, R. Gutberiet, and I. Raye.



DESCRIPTION Unispas (brand of flavo-ate HCl) is a new antispasmodic offered specifically for the relief of symptoms associated. with various unalogic disorders. Unispasi exerts its effect directly on the muscle. Chemically, flavorate hydrochloride is betapiperidinoethyl 3-methylflavone-8-carbovylute hydrochlande. The empirical familia of flavorate hydrochloride is C24Fl25FlO4 • HCL The structural formula appears below.



ACTION Flavoxate hydrochloride counteracts smooth muscle spasm of the urinary

INDICATIONS Unspas (brand of flavorate HCI) is indicated for symptomatic relief of dysuria, urgency, nocturia, suprapubic pain, frequency and incontinence as may occur in cystitis, prostotitis, urethritis, urethrocystitis/ urethrotrigonitis. Unispas is not indicated for definitive treatment, but is compatible with drugs used for the treatment of urinary tract

CONTRAINDICATIONS Urispas (brand of flavorate HCI) is contraindicated in potients who have any of the following obstructive conditions: pyloric or duodenal obstruction, obstructive intestinal lesions or ileus, achalasia, gastrointestinal hemorrhage, and obstructive proporhies of the lower urinary tract.

WARNINGS Urispos (brond of flovoxate HCl) should be given cautiously in patients with suspected glaucoma.

Usage in Pregnancy — Safety in women who are or may become pregnant has not been established. Therefore, Urispas (brand of flavoxate HCl) should not be given except when the expected benefits outweigh the possible hazards.

Usage In Children—This drug cannot be recommended for infants and children under 12-years of age because safety and efficacy have not been demonstrated in this age group.

PRECAUTIONS in the event of drowsiness and blurred vision, the patient should not operate a motor vehicle or machinery or participate in activities where alertness is

ADVERSE REACTIONS Adverse reactions reported include nausea and vomiting, dry mouth, nervousness, vertigo, headache, drowsiness, blurred vision, increased ocular tension, disturbance in eye accommodation, urlicario and other dermatoses, mental confusion especially in the elderly patient, dysuria, tachycardia and palpitation, hyperpyrexia, eosinophilia and leukopenia (1 case which was reversible upon discontinuation of the drug).

DOSAGE AND ADMINISTRATION Adults and children over twelve years of age: one or two 100 mg. tablets three or four times a day. With improvement of symptoms, the dose may be reduced. This drug cannot be recommended for infants and children under 12 years of age because safety and efficacy have not been demonstrated in this age group.

HOW SUPPLIED 100 mg. tablets, in bottles.

Computer Checks Camptothecin Drugs For Their Activity Against Cancer

Continued from page I ing group of chemists at Wayne State Uni-

versity led by A. I. Meyers, Ph.D. Coauthor was J. C. Howland, Ph.D., of the L.S.U. Department of Pharmacology.

Free Radicals May Be Active in Generation of Cancer

From Johns Hopkins Free radicals appear to be active in the is university,

Such agents as benz[a]pyrene appear to form free radicals to a much greater extent than other compounds do under mild conditions, like those that exist in the body, he said. This formation of free radicals, which act directly on DNA, may explain the specific activity of these compounds in: cancer formation.

The radicals were detected by electron Ruddick, Ph.D. spin resonance.

Evidence that benz[a]pyrene is converted inside the cell to an active substance the life expectancy of the newborn rats, that readily combines with DNA was pre- and toxic effects were measurable at a sented in an earlier report by Ronald dietary level of a 0.25 microgram. corentzen, Ph.D.; also of Johns Hopkins.

repair system for the modified DNA was detected, suggesting that one also exists

Sald to Kill Their Fetuses

From Otlawa

► Unborn rats were reported to have

A daily dietary level as low as 0.5 microgram per kg. of body weight reduced

Dioxins have been identified in mar-

Dioxin Fed to Pregnant Rats

been killed by feeding pregnant females and half a day at the clinic. While working extremely small amounts of a chemical of in the fields they check on the health of generation of cancer by potent chemical; the dioxin class. Dioxins have been found their fellow workers, to whom they teach 6.3 hours. agents, said Bertram L. Cohen, Ph.D., of as contaminants in a widely used herbicide hygiene as well a and even in certain foods, the report ple illnesses.

Four micrograms of 2,3,7,8-tetrachlorodibenzo-p-dioxin per kilogram of body weight fed to gestating rats for six to 15 days killed the fetuses, said K. S. Khera, Ph.D., of the Food and Drug Directorate Research : Laboratories, Department of Health and Welfare, Ottawa, and J. A.

bigger hospitals in Peking. Work Half Day in Fields

The commune itself is divided into

work in the fields. Dr. Chou treats patients

from 681 households in the production

there is no sign of records or other equip-

The clinic practices mainly Western

medicine, with some acupuncture for such

ailments as headaches or stomach upsets.

The barefoot doctors work half a day with the production brigade in the fields

Although clinics such as the one operated by Dr. Chou are rudimentary by Western standards, they offer a viable alternative to the total lack of facilities available before. Previously the sick could spend days waiting for treatment at the commune hospital. Now, minor aliments, which formerly would have meant loss of work, are dealt with promptly, and a valuable amount of work time for the "brigade" is saved.

Although relatively primitive at the lower levels and forced on China by ne-Lorentzen, Ph.D.; also of Johns Hopkins. Dioxins have been identified in mar cessity, the paretoot doctor program has been active apecies, had a lowered sur-olente, olente, o 'URISPAS' IS DIFFERENT

Instead of acting indirectly through the parasympathetic nervous system, as do anticholinergics, 'Urispas' acts directly on the smooth muscle of the bladder and urinary tract. It also differs in action from analgesic dyes and does not stain.

prostatitis

FOR THE 6 MAJOR SYMPTOMS OF BLADDER SPASM

Frequency, which is not only inconvenient, but means more frequent pain if pain is present. Nocturia, which adds the additional dimension of

Dysuria, which can range from mild discomfort to

Urgency, which intensifies the problem of bladder control with worry about wetting.

Incontinence, when it is caused by bladder spasm. Suprapuble pain, with its uncomfortable feeling

TWO PRINCIPAL USES

to relieve urinary symptoms

such as frequency, dysuria and

disorders such as cystitis and

urgency as may occur in urologic

Smith Kline & French Laboratories, Philadelphia

To provide prompt relief of urinary symptoms while you

As an adjuvant to antibacterial or anti-infective therapy in patients whose symptoms are due to urinary tract

Before prescribing 'Urispas', please see adjoining column for a complete list of adverse: reactions, as well as information on contraindications, warnings, precautions, and dosage and administration.





At night, she wants to wash her hands of the whole household routine. But there's always another shirt around the corner.

And she finds herself counting them like the proverbial sheep to overcome her insomnia.

It could be so much ea er with Doriden. Because Doriden works nice and easy. Usually brings sleep quickly and smoothly. Preexcitation is rarely a problem.

What's more, Doriden wears off soon enough so your patient usually wakes naturally refreshed. Morning hangover is also rare.

And Dorlden is generally well tolerated by the aged, the chronically ill or hospitalized, those with renal or pulmonaty dysfunctionpractically anybody with insomnia.

So with Doriden you both rest assured.

INDICATIONS: For night-time, daytime, and perative sedation, as well as during first stage of labor, CONTRAINDICATIONS; Known hypersensitivity

WARNINGS: Caution patients about possible combined effects with alcohol and other CNS depressants. Do not operate machinery, drive motor vehicle, or engage in activities requiring complete alertness shortly after

ingesting drug.

Dosage of coumarin anticoagulants may require adjustments during and on cessation of glutethimide therapy. Physical and Psychological Dependences Physical and psychological dependence have occurred. Prescribe cautiously for patients known to take excessive quantities of drugs. Limit repeated prescriptions without adequate medical supervision. Withdrawal symptoms include nauses, abdominal discomfort, tremors, convulsions, and delirium. Newborn infants of mothers dependent on glutethimide may also exhibit withdrawal symptoms. In the presence of dependence, dosage should be reduced gradually.

Pregnancy: Use of any drug in pregnancy or lactation requires weighing potential benefits against hazards.

PRECAUTIONS: Total delay dosage above 1 Gm is not recommended for continued administration. In presence of pain, which may counteract the sedarive effect of glutethimide, an analgrafic should also be prascribed.

ADVERSE REACTIONS: Withdraw glutethimide if a generalized skirt rash occurs. Rish usually clears.

ally, a purpuric or unicarial rash may occur; exfoliative dermatitis has been reported rarely. With recommended doses, there have been rare reports of nausea, hangover, paradoxical excitation, and blurring of vision. Rerely, acute hypersonsitivity reactions, porphyria, and blood dyscrasiss (thrombocytopenic purpura, aplastic anemia, leukopenia) have been reported.

DOSAGE: To avoid overredevice, individuality

DOSAGE: To avoid oversedation, individualize dosage. Not recommended for children under 12. Night-time sedation: 0.25 to 0.5 Gm at bedtime. Repeat dose if necessary, but not less than 4 hours before arising. Daytime sedation: 0.125 to 0.25 Gm t.i.d. after meals. Preoperative sedation: 0.5 Gm the night before surgery; 0.5 to 1 Gm 1 hour before anesthesia. First stage of labor: 0.5 Gm st onset of labor. Repeat if necessary.

SUPPLIED: Tablets, 0.5 Gm (white, scored); bottles of 100, 500, 1000 and Strip Dispensers of 100. Tablets, 0.25 Gm (white, scored); bottles of 100 and 1000. Tablets, 0.125 Gm (white); bottles of 100. Capsules, 0.5 Gm (blue and white); bottles of 100. Capsules, 0.5 Gm (blue and white); CE: To avoid ove

Consult complete literature before prescribing

CIBA Pharmaceutical Company
Division of CIBA-GEIGY Corporation
Summit, New Jersey 07901

 $\mathbf{C} \mathbf{I} \mathbf{B} \mathbf{A}$

.排品等的文字包 可定样的 AND ADDRESS.

• "Heart Watch Urged in Vital Hepatitis," says a cover of Internist Observer sent to us by Dr. Edgar M. Allen of Warden, Wash, who wants to know if that's

• The high moral standards of precision machinery were the subject of a story in the Los Angeles Times that was forwarded to us by Dr. Albert Fields of that city.

"Dial Manufacturing Co., a precision machine shop, does not have dealings in pornography," it began, and ended by explaining that the company had leased the premises to another company, which had subjet part of it "to others who apparently engaged in activities not compatible with a precision machine shop."

 Child (1). An old friend has turned up in two more places. Dr. Nellie D. Wright of Bristol, Va., found it in J.A.M.A.:

"All states, starting with the early 1800's passed laws against abortion except when necessary to save the life of the mother, (or in some few cases to protect her health or to save the life of the child).'

Dr. Howard R. Grove of Bakersfield, Calif., found it in American Medical

"In Washington, abortion is permitted only to preserve the life of the mother or that of the child."

• Child (2). Dr. Sam A. Nixon of Floresville, Tex., on the other hand, found an odd type of neonate in an instructional ad on VD in Family Health:

"In one small city with a population of less than 30,000 one case alone, when traced out, led to the identification and cure of over one hundred and forty-six people including one congenital newborn."

• Readers old enough to remember the era of double-talk should be given a touch of nostalgia by a lucky find in American Medical News that was made by Dr. Alan B. Van Sciver of Larchmont, N.Y.

"William W. Travis of Alabaster, Ala., presumes 'renders' included hospital

They're the ones who dispense phrammises, obviously,

 Drs. Charles E. Jaeckle of Defiance, Ohio, and T. Stacy Lloyd, Jr., of Fredericksburg, Va., were not overimpressed with a MEDICAL TRIBUNE headline that said: "Psychiatric Ills Common in Young Adults Who Tried Sulcide."

("Profound observation!" wrote Dr. Jaeckle; "So what else is new?" asked Dr. Lloyd; "Well, that's what the silly story said," said the chap responsible for the

· "Don Rickles' wife gave birth to a Cedars of Lebanon Hospital. He is the couple's second child," says the item in the Santa Barbara, Calif., News-Press that J. F. Smithcors, D.V.M., sent in.

Now there's a cause for sibling rivalry for the firstborn!

• Breakthrough! Dr. Mark J. Popp of Brookfield, Wis., contributed the following prize award announcement from the minutes of the annual business meeting of the American College of Obstetricians and Gynecologists. The prize went to an exhibit entitled: "The Use of Anti-RH Antibiotics for the Prevention of RH Immunization.

• Dr. Herbert Notkin of Philadelphia

"There is a Public Health Service department with the following name:

"Institutional Assurance on Investigations Involving Human Subjects, Including Clinical Research and Investigations in Behavioral and Social Sciences."

It's probably known as Freddy to the ingroup.

Readers are invited to contribute items of 100 words or less to this column. Con-tributions should be: mailed to MEDICAL TRIBUNE, 110 East 59th St., New York. MATERIAL CONFIGURACIONAL

MEDICAL TRIBUNE

Knee Injury Rate Much Higher In Footballers Harmed Before

NEW YORK-A four-year study of more than 61,000 varsity high school football neth Hafner, of the New York State Pub-players shows that those with previous lie High School Athletic League, also proserious knee injury are more apt to be seriously reinjured, at a rate 15 to 17 times greater, than players with sound knees, it

was reported here at a meeting of the Medical Society of the State of New York Committee on the Medical Aspects of Sports. The study clearly

implicates the use of

ong cleats on the

sole of the shoe and

Ands that elimination DR. CALLAHAN reduce the number of knee injuries by half, according to William T. Callahan, Ph.D., director of the study, which was

initiated by the New York State Public High School Athletic Association. "With regard to reducing the seriousness of injuries to the lower extremities, particularly the knee," he said, "the data Indicated clearly that two equipment combinations—low shoe, disk heel, ankle wrap and low shoe, short cleats, and no ankle

support—produced a statistically significant and lower rate of serious injuries. Conversely, a combination of low shoes, conventional cleats, and ankle tape produced a greater number of serious knee injuries than expected.

"It is recommended, therefore, that varsity high school football players be outfitted with low shoes and some form of disk, or flat heels, or short cleats. It is further recommended that a similar modification-shortening-of the sole cleats on football shoes be made as soon as possi-

in association with Francis Crowley, Ph.D., Fordham University, and J. Kenposed that players who suffer a serious knee injury he required to take part in a planned program of rehabilitation under the direction of a physician as a precondition to further varsity football competition. Furthermore, such players should be rigorously examined by a physician at the start of each season to determine the degree of rehabilitation of the injured knec and ultimate fitness of the player to participate in competition.

An Evolutionary Process

Discussing the study's findings, Dr. Callahan said that the reduction of serious injuries to the lower extremities is, and will he, an evolutionary rather than a revolutionary process.

"For example," he continued. "if all players were immediately equipped with low shoes and drastically shortened cleats (heel and sole), the total number of serious knee injuries (328) would be reduced by only some 10-20 cases. Furthermore, if all players with a history of previous serious knee injuries were completely rehabilitated and returned to play, the total of serious knee injuries would only be reduced, state-wide, by another 40-50 cases.

"By means of simple arithmetic, it can be seen that some 258 serious knee injuries could still be expected during the course of a varsity high school football season. Elimination of long cleats on the sole of the shoe [and of cleats on the heel] will probably cut that total in half-perhaps to some 130 serious injuries."

Other recommendations: • That more attention be given to the relative levels of physical maturity of the youngest and oldest boys eligible to compete in varsity play.

The study, conducted by Dr. Callahan • That year-round programs of general

Appointed at Harvard

Dr. Robert T. McCluskey has been appointed S. Burt Wolbach Professor o Pathology by Harvard Medical School. He is also pathologist-in-chief at the Children's Hospital Medical Center.

physical fitness for all high school students, thletes and noncompetitors, be con-

• That year-round conditioning programs be directed to the areas of highest vulnerability, such as the knee.

 That extended spring or summer preseason conditioning programs be instituted for football players.

Dr. Caliahan stressed that the results of the study indicate there is a great need for changing the rules of high school football to modify or eliminate potentially dangerous situations and also a need for upgrading the understanding and skills of game officials.

"Certain techniques, such as 'crack back' blocking, piling on, clipping, spearing, 'blind side' blocking, and the like, must be discouraged by coaches and officials," he said. "Field zones in which clipping is legal must be restricted and innovations designed to improve safety-restriction of blocking to above the waist, for example-must be tried and evaluated regardless of whether [or not] they change the 'traditional' nature of the game."

Medicolegal Report

Appendicitis Misdiagnosis Is Not Penalized

CHICAGO-A physician who misdiagnosed appendicitis as tonsillitis was not negligent, the Supreme Court of Iowa ruled. noting that the symptoms and x-ray findings were consistent with both diseases.

The patient, a five-year-old child, had vomiting, abdominal pain in the lower right side, and a temperature of 101° F. and was brought to the hospital by her mother. She told the examining physician, who had not seen the child before, that her daughter had appendicitis, but the physician, after examination and the taking of x-rays, made a diagnosis of tonsillitis and sent the child home with medication.

On the seventh day of illness the child was admitted to the hospital, still complaining of stomach pain, and, after a blood test and x-rays, underwent surgery, which disclosed a ruptured appendix and peritonitis. The infection was drained, and, two months later, the appendix was removed. About a month later, the child wa brought to the physician for treatment of a penicillin reaction and a bowel obstruction.

Child's Father Brought Sult

The child's father brought action for malpractice against the physician, his partnership, and the hospital, and the trial court directed a verdict for the physician. and other parties, according to the report on the case by the general counsel of the American Medical Association. The father appealed the verdict.

The physician testified that at the first hospital visit, when he had seen the patient for about 10 minutes, he had ex-

He had not got a good look at her tonsils but had noticed that the roof of her mouth was red, and he said that her white blood cell count was 5,000, consistent with ton-

The radiologist, who had reported to the physician his impression from the x-rays that there was localized reflex ileus secondary to appendicitis, testified on the difference between an impression and a diagnosis, and he stated that many disorders in addition to appendicitis could be consistent with reflex ileus, including ton-

The court said that a physician does not insure the correctness of his diagnosis and

amined her stomach without finding suf- that in the present case laymen could not ficient signs for a diagnosis of appendicitis. conceive of the complex nature of the diagnostic problem. It held that there was no evidence of incorrect interpretation of the x-rays and that the physician had no duty to advise the parents that the condition seen on the x-rays was also consistent with appendicitis.

It further held that the physician and the radiologist were independent contractors, not hospital employees, and the hospital was not required to inform the patient of the radiologist's impression. The radiologist's reports were made to the physician who was responsible to the parents for the proper handling of the case. (Sinkey v. Surgical Associates [186 N.W. 2d 658 (Iowa Sup. Ct., May 5, 1971)].)

MEDICAL MEETING SCHEDULE

Domestic Meetings

Oct. 18-22 ... American College of Surgooms, Atlantic City, N.J.
Oct. 18-22 ... Society for Applied Spectroscopy,
St. Louis
Oct. 19-22 ... American Society for Microbiology, Atlantic City, N.J.
Oct. 21-23 ... American Academy of Clinical Toxicology, Philadelphia
Oct. 21-23 ... Nevada State Medical Association,
Les Veges
Oct. 22-30 ... American Society of Clinical Pathologists, Boston
Oct. 22-30 ... College of American Pathologists,
Boston

Boston National Practice Management and

Oct. 23-28 ... National Practice Management and Investment Sentiar., 45th Annual Meeting, Honoluly.
Oct. 28-27 ... Eastern Orthopsedia Association, White Sulphur Springs, F. Fa.
Oct. 24-28 ... American College of Chest Physicians, Philadelphia
Oct. 24-30 ... American College of Gastroonter

Oct. 26-27 ... New York State Benith Depart-mont, Birth Defects Institute, ity and Society," Albany
Oct. 27-30 ... Gerentological Society, Houston, Tex.

... American Urological Association, Mid-Atlantic Section, Williams burg, Va.
Oct. 27:30National Hemophilia Foundation. Oct. 29-80 American Medical Society on Alco-...

holism, Baltimore.
Oct. 29-31 American Society of Therapoutic Radiologists, Phoenix, Aris. Association of American Medical, Colleges, Westington

Society of Teachers of Family Med-leine, Washington American Medical Tennis Associa-. tion, Las Vogas, Nev.

Academy of Psychosomatic Medi-cine, 18th Annual Meding, Sarasols, Ple.